

Chatham University 2022-2023 Course Catalog

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course catalog/ 2022-2023 Catalog

2022-2023 Course Catalog

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Accounting (BA)	205
Applied Data Science Analytics (BS)	215

Cultural Studies: African American Studies Concentration (BA)	312
Economics (BA)	316
English (BA)	339
History (BA)	373
International Business (BA)	396
Management (BA)	413
Management Information Systems (BA)	424
Marketing (BA)	431
Music (BA)	484
Policy Studies (BA)	519
Political Science (BA)	527
Psychology (BA)	533
Sustainability (BA/BS)	563

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Applied Data Science Analytics	215
Applied Machine Learning	612
Applied Management	413
Art Museum Studies	614
Biology	242
Botany	242
Chemistry	275
Communication (Graphic Design, Journalism, Public Relations)	286
Creative Writing	295
Criminology	304

Dance	616
Economics	316
English	339
Environmental Writing	339
Exercise Science	357
Food Studies	371
French	405
German	405
History	373
Holocaust, Genocide, and Human Rights Studies	618
Interior Architecture Theory	389
Jewish Studies	620
Management Information Systems	424
Marketing	431
Mathematics	442
Media Arts (Film and Digital Technology, Graphic Design, Photography)	449
Music	484
Music Technology	496
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Political Science	527
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Psychology	533
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Social Work	555
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Mission and Vision

Founded in 1869, Chatham University is a fully coed institution with an enrollment of over 2,200 students and over 60 undergraduate and graduate programs in our areas of excellence: **sustainability; health & wellness; business & communications; and the arts & sciences**. Chatham is the alma mater of environmental icon Rachel Carson (Class of '29), and is recognized as a leader in the field of sustainability, having been selected as one of the Top 50 Green Colleges by *The Princeton Review*; ranked in the top five nationally for sustainability achievements in the Sustainability Tracking, Assessment & Rating System™ (STARS); and mentioned in a 2012 *Forbes* article as one of the places "contributing to Pittsburgh's transformation into a destination for green living."

Building on these accomplishments, Chatham opened in 2014 the world's first fully sustainable campus in higher education, [Eden Hall Campus](#). Consistently ranked as a best college by *U.S. News & World Report* in the Regional Universities North category, Chatham consists of [the School of Health Sciences](#); [the Falk School of Sustainability & Environment](#); [the School of Arts, Science & Business](#); and [the School for Continuing & Professional Studies](#).

Mission Statement

Chatham University prepares its students to build lives of purpose, value, and fulfilling work. Through professional skill development and liberal arts learning, Chatham prepares its graduates to be informed and engaged citizens in their communities; to recognize and respect diversity of culture, identity, and opinion; and to live sustainably.

Two Campuses

Chatham's [Shadyside Campus](#) is the University's historic, original location and is one of the country's most unique and picturesque, urban college campuses consisting of the 39-acre Woodland Road arboretum. The Shadyside Campus expanded in 2008 with the renovation and opening of the LEED Silver building, [Chatham Eastside](#), near the Bakery Square development in Pittsburgh.

Chatham became the largest university by land mass in Allegheny County in 2008 with the gift of the 388-acre [Eden Hall Campus](#) in Richland Township, approximately 19 miles north of the Eastside Campus. Eden Hall Campus, home to Chatham's Falk School of Sustainability & Environment is the first academic community in the world built from the ground up for the study of sustainable living, learning, and development. Using the latest in environmentally responsible technology, design, and innovation, Eden Hall will be self-sustaining in every way by emitting zero carbon emissions, managing all waste and storm water on-site, and producing more energy than it consumes. It is designed to one day serve more than 1,500 students in the fields of sustainability, health sciences, business, and more. By protecting valuable watersheds, incorporating surrounding land and agricultural resources, and rehabilitating existing farm

structures alongside developing new green buildings, Eden Hall will be a one-of-a-kind venue for education, conferences, community outreach, and ecotourism.

Accreditation

Middle States Accreditation

Chatham University is accredited by the [Middle States Commission on Higher Education](#), 3624 Market Street, Philadelphia, PA 19104 (267-284-5000). The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. Information regarding the complaint process can be found on the [Middle States website](#).

Status: Member since 1924

Last Reaffirmed: June 23, 2017

Pennsylvania Department of Education

Chatham University is authorized by the Pennsylvania Department of Education (PDE) to confer degrees. The Department of Education can be reached by writing to the Commonwealth of Pennsylvania, Department of Education Office of Postsecondary and Higher Education, 333 Market Street, Harrisburg, Pennsylvania 17126, or by telephone at 1-717-783-6788. Additional information regarding the PDE complaint process can be found on the [PDE website](#).

Chatham University is not regulated in Texas under Chapter 132 of the Texas Education Code.

For more information and a list of Programmatic Accreditations, [click here](#).

History of Chatham University

Chatham University is a nearly 150-year old educational institution in Pittsburgh, Pennsylvania that today has over 2,100 undergraduate and graduate students in over 60 degree programs studying on campus or online.

Chatham was chartered on December 11, 1869, under the name Pennsylvania Female College. The Reverend William Trimble Beatty, pastor of the Shadyside Presbyterian Church, led a group of Pittsburghers in making the dream to provide women with an education comparable to that which men could receive at the time at "colleges of the first class." The founders were somewhat ahead of their time: 1869 was the year that the National Association of Women's Suffrage was established, and the year John Stuart Mill published *The Subjection of Women*. Pennsylvania Female College occupied what was then the largest private residence in Allegheny County - the George Berry mansion atop Fifth Avenue in Shadyside. Fifteen faculty and just more than 100 students occupied the 11-acre campus.

In 1890 the name of the institution was changed to Pennsylvania College for Women, and in 1955 the name was changed again to Chatham College in honor of William Pitt, First Earl of Chatham and namesake of the City of Pittsburgh. In 1994, Chatham College expanded around its historic undergraduate women's college by beginning to offer graduate programs to both men and women with a special emphasis in the health science fields.

The Commonwealth of Pennsylvania granted Chatham university status in 2007, which was officially announced on May 1, 2007 and marks Chatham's newest tradition, University Day. On May 1, 2008 Chatham received a gift unequalled in its history: the Eden Hall Campus from the Eden Hall Foundation. The University's Shadyside Campus expanded in June 2008 to include Chatham Eastside near Bakery Square approximately one mile from Woodland Road and home to many of Chatham's in-demand health science programs.

In 2010, Chatham launched the Falk School of Sustainability & Environment, and broke ground in 2012 on its new home, Eden Hall Campus-the first campus in the world built from the ground up for the study of sustainability.

On May 1, 2014 Chatham University's Board of Trustees voted in approval of a resolution that expanded access to a high-quality Chatham undergraduate education to more students, ensured that Chatham can meet the educational needs of its students and the region for the future, and ensured the continuation of Chatham's 145-year commitment to advancing the causes of women with the founding of the Chatham University Women's Institute. The resolution, in part, states:

The Board of Trustees hereby approves: (1) the reorganization of Chatham University by academic units within vertically integrated Colleges and Schools; (2) the implementation of coeducation within all Chatham University Colleges and Schools; and (3) alongside the commitment to each student who will attend

Chatham University, the creation of structures and programs to preserve Chatham University's commitment to women's education and leadership.

In Spring 2014, Chatham opened the first phase of Eden Hall Campus and broke ground on the next phase of construction including development of a residence hall and dining hall.

Non-Discrimination Policy

Equal opportunity and affirmative action are integral to employment and education at Chatham University because we recognize that the University's present and future strength is based primarily on people and their skills, experience, and potential to develop, no matter what their race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, disability, veteran status, marital status, or any other legally protected status. The University will not tolerate any form of discrimination on these bases (i.e., race, national origin, disability) including different treatment, and prohibits retaliation against those who file complaints about discrimination or who participate in the investigation of such complaints.

The University has a policy of equal opportunity employment and educational opportunities and affirmative action that is broad in scope and supported at all levels of the University.

The University will make good faith efforts, (through responsible managers and officials) in accordance with the law, to recruit, hire, train, and promote persons in all job titles, without regard to race, color, religion, gender, sexual orientation, gender identity or expression, marital status, familial status, pregnancy, national origin, age, disability, or status as a disabled veteran or veteran of the Vietnam era, except when age or sex are bona fide occupational requirements or when a specific disability constitutes a bona fide occupational disqualification.

University managers and officials shall support affirmative action principles to ensure that members of protected categories are introduced into the work force, the student body, and University community. Students and employees in protected categories are encouraged to apply for and participate in all University provided opportunities including promotional, educational, and training opportunities.

University officials shall make continual efforts to ensure that hiring and promotion decisions are in accordance with equal opportunity principles by imposing only legitimate business requirements for hiring and promotional opportunities. Likewise, student admission and retention decisions will be made with equal opportunity at the forefront of decision making.

All personnel actions, such as compensation, benefits, transfers, layoff, return from layoff, as well as University-sponsored training, education, tuition assistance, and social and recreational programs, will be administered without regard to race, color, religion, gender identity or expression, sexual orientation, national origin, age, marital status, familial status, disability, status as a disabled veteran or veteran of the Vietnam era, or any other legally protected status.

University managers and officials shall base all employment and student admission decisions on the equal opportunity principles with the intent to further the University's commitment to those principles.

The University encourages members of protected groups to participate in its campus-wide social activities and shall post notices of all campus-wide social events for the benefit of all employees and students.

The President's office, with the assistance of the Human Resources office, will monitor to ensure compliance with the affirmative action policies of the University.

Chatham University has adopted this policy on a strictly voluntary basis. The existence of this policy should not be construed as an admission by the University in whole or in part, that in fact members of protected groups have been or are presently being underutilized, concentrated, or discriminated against in any way by the University in violation of federal, state or local fair employment practice laws.

Policy Effective Date: May 1, 2016

Updated: April 16, 2018

[Download Chatham University's Non-Discrimination and Grievance Procedure](#)

Awards and Accolades

Chatham is proud of the recognitions we've garnered locally, nationally, and internationally. This page offers a selection of our awards and accolades.

Chatham routinely ranks within the top 25 universities in the world for sustainability as measured by the Association for the Advancement of Sustainability in Higher Education ([AASHE](#))'s Sustainability Tracking, Assessment & Rating System ([STARS](#)).

Chatham University was selected for the *Princeton Review's* 2019 Green Honor Roll for receiving a score of 99 (the highest possible score) in the 2019 Green Rating tallies. Only 26 schools out of 648 colleges were selected for this honor.

Chatham University has been recognized as a college that is a best place to learn, to grow, and to succeed by [Colleges of Distinction](#). Chatham's inclusion was determined through criteria focusing on excellence in engagement, teaching, community, and outcomes – the aspects that have been shown to result in effective undergraduate education.

For five consecutive years, Chatham University has been admitted to the [President's Higher Education Community Service Honor Roll](#) (2011, 2012, 2013, 2014, 2015) for engaging its students, faculty, and staff in meaningful service that achieves measurable results in the community.

Chatham is consistently ranked as a best college by [U.S. News & World Report](#) and among the top master's-level institutions in the Northeast by [The Princeton Review](#). Chatham was also ranked as a Best Value School in the same category in 2019. [College Magazine](#) ranked Chatham within the top three colleges for aspiring women leaders.

Chatham University's [Eden Hall Campus and K-12 Program](#) received a 2018 Best of Green Schools Award from the Center for Green Schools at the U.S. Green Building Council (USGBC), in collaboration with the Green Schools National Network (GSNN).

Eden Hall Campus was recognized nationwide with a [2018 Education Facility Design Award of Excellence](#) from the American Institute of Architects.

Chatham has been recognized as a [Tree Campus USA](#) for eight years running (2012-2020) in recognition of the University's commitment to promoting healthy trees and engaging students and staff in the spirit of conservation.

In 2020, [Sierra Magazine](#), the official publication of the Sierra Club, ranked Chatham University as the country's [17th greenest university](#) in its annual ranking of the nation's Cool Schools. This is the sixth year in a row that Chatham has earned this top 20 honor.

In 2013, Chatham received a prestigious [Climate Leadership Award](#) from Second Nature, a nonprofit that

works to create a healthy, just, and sustainable society by transforming higher education. Also in 2013, the International Sustainable Campus Network honored Chatham with a Sustainable Campus Excellence Award, the only North American institution so honored that year.

Chatham has been recognized by the U.S. Green Building Council, the [U.S. Environmental Protection Agency](#) (2012, 2013), and the [Citizens for Pennsylvania's Future](#) (2011), and was the first university in Pennsylvania to be recognized by the [League of American Bicyclists](#) as a Bike Friendly University.

Chatham was ranked ninth in the country in undergraduate participation in study abroad among the Top 40 Master's Colleges and Universities (based on the 2010 Carnegie Classification of Institutions of Higher Education) in the [2012 Open Doors Report](#). It placed in the Top 50 in 2015.

Chatham received the [Andrew Heiskell Award for Innovation in International Education: Internationalizing the Campus \(2003\)](#), presented by the Council for International Exchange of Scholars.

Chatham's online programs were recently ranked as one of the "[Best Online Colleges in Pennsylvania for 2018](#)" by The Best Colleges. Chatham was also ranked #2 for "Most Affordable Online Colleges in Pennsylvania" across all accredited colleges in PA that were reviewed.

In 2018, Chatham's graduate and undergraduate nursing programs earned a "Best Online Program" ranking by [U.S. News & World Report](#). The MSN and DNP programs were ranked in the top 100 of all online programs.

In 2007, [Poets & Writers](#) named Chatham's MFA in Creative Writing one of "Nine Distinctive Programs" and the [Atlantic Monthly](#) named it one of five innovative/ unique programs in the country in its "Best of the Best" graduate program listings. In January 2012, [The Writer](#) named it one of the "Four top schools you should consider" and in 2009, named it one of ten programs that offer a specialty focus.

Chatham is one of only five universities in our region to have a [Phi Beta Kappa](#) chapter, the most prestigious national undergraduate honors society.

Chatham's Board of Trustees was one of six institutions honored with the 2016 [John W. Nason Award](#) for Board Service by the [Association of Governing Boards of Universities and Colleges](#).

Chatham's Women's Business Center, hosted by [The Center for Women's Entrepreneurship](#) at Chatham University, was selected by the U.S. Small Business Administration as the 2018 Women's Business Center of the Year.

Chatham University has been recognized as a university committed to increasing college student voting rates with the recognition of a "silver seal" award from the [ALL IN Campus Democracy Challenge](#).

In 2019, Chatham was proud to have celebrated its [150th anniversary](#).

Consumer Information

In compliance with the Higher Education Opportunity Act of 2008 (HEOA) and the Student Right-to-Know act, Chatham is committed to providing information to current and prospective students, parents, and others that can guide them in making decisions regarding the University's programs and offerings.

To view a list of Chatham University's Student Consumer Information, please [click here](#).

Catalog Disclaimer

As of our date of publication, our catalog is true and correct in content and policy, but the provisions of it are not to be regarded as an irrevocable contract between the students and Chatham University. Since University curricula, programs, and policies cannot be static in a changing environment, the information in this catalog is subject to change by the University at any time. For educational and financial reasons, the University reserves the right to change any of the provisions, statements, policies, curricula, procedures, regulations or fees found in this catalog. Changes will become effective whenever the proper authorities so determine and will apply to both prospective students and those already enrolled. As a result, students, applicants, and other users of this catalog should consult with appropriate University offices to verify the current text or status of policies, programs, descriptions of curricula, or other information in this catalog.

Some courses appearing in the live version of the Catalog will not appear in the archived pdf version for the same academic year. These were added to the database to facilitate scheduling for the following academic year and while they will appear in the current year's active course list they were not actually offered.

Undergraduate Admission

The Office of Admissions is your resource to answer questions about Chatham University, to assist you in the application process, and to help you make the most informed decision possible about your college education.

For information on Undergraduate Admission, [click here](#).

Admission Procedures for Transfer Students

Requirements

Transfer student applicants must submit the following:

- Completed [application for admission](#)
- Official academic transcripts from all past colleges and universities in which the student was enrolled

Required prior to matriculation:

- Final official high school transcripts (and/or GED, if applicable)

High school transcripts and/or GED transcripts are not required to review a student's application. * *These documents are required of all transfer students accepting offers of admission to Chatham University. Final high school/GED transcripts must be received prior to a student's enrollment.*

If the institution has reason to believe that the high school diploma is not valid or was not obtained from an entity that provides secondary school education or if the student was placed in a Verification Tracking Group that requires verification of high school completion status, the institution reserves the right to evaluate the validity of the student's high school completion.

Students with fewer than 24 credits may apply using our test-optional policy and choose not to submit their standardized test scores at the time of application. If not submitting their scores, in addition to the required application materials, applicants must submit the following:

- Résumé
- Graded academic writing sample
- Complete an on-campus interview
- Portfolio (optional)

If applicants feel that these materials do not adequately represent their academic abilities or explain their academic history, they are encouraged to submit additional explanatory materials to strengthen their application.

General Education Requirements

Chatham University requires undergraduate students to complete a minimum of 40 credits of general

education as specified by the Pennsylvania Department of Education. Students transferring to the University who have completed 40 credits of general education at an accredited institution of higher learning will be considered to have completed their general education requirements.

Submission of Credits

All potential transfer credit in progress or completed prior to acceptance to Chatham must be submitted to the University before the student begins courses. This requirement includes all Advanced Placement and International Baccalaureate courses. All official transcripts will be evaluated on an individual basis.

Articulation Agreements

If you are transferring credits, we have Articulation Agreements with a number of schools to make the process easier and your hard work count.

For more information, [click here](#).

Admission for International Students

International student applicants must submit the following:

- Completed [online application](#) for admission
- Admissions essay or personal statement
- All official secondary and postsecondary transcripts, mark sheets or records. Original transcripts and official English translations are required for non-English institutions. Professional credential evaluation may be required for non-U.S. postsecondary academic records.
- Official test scores - TOEFL or IELTS(Chatham code: 2081), iTEP, PTE, ACTFL, or STEP
- SAT and ACT scores (optional)
- One letter of recommendation
- Copy of passport photo page (with identification information)
- Copy of immigration documents (if currently living in the United States)
- Proof of financial support (official bank statement, signed bank letter, or financial guarantee indicating enough funds to cover the first year of education at Chatham).

Transcript Evaluation Policy

Credentials from an educational system other than the United States will be reviewed initially by a Chatham in-house credential evaluator. Applicants may be required to have their transcripts evaluated by a foreign credential evaluation service such as NACES, ECE, WES, or IERF. Any costs incurred for the professional evaluation are the responsibility of the applicant.

If applicants are transferring from a US institution, official college transcripts from all colleges attended must be submitted to Chatham University.

For more information, [click here](#).

Admission for Early Entrants and High School Dual Enrollment

Non-degree-seeking students include visiting high school dual enrollment students, Pittsburgh Consortium of Higher Education (PCHE) students, visiting college students outside of PCHE, or adult students wishing to take courses for continuing education.

Non-degree applications for both undergraduate and graduate course study are accepted.

For more information, [click here](#).

Admission Procedures for Gateway Students

Requirements

Transfer student applicants must submit the following:

- Completed [application for admission](#)
- Official academic transcripts from all past colleges and universities in which the student was enrolled

Required prior to matriculation:

- Final official high school transcripts (and/or GED, if applicable)

High school transcripts and/or GED transcripts are not required to review a student's application. * *These documents are required of all transfer students accepting offers of admission to Chatham University. Final high school/GED transcripts must be received prior to a student's enrollment.*

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- Résumé
- Graded academic writing sample
- Complete an on-campus interview
- Portfolio (optional)

If applicants feel that these materials do not adequately represent their academic abilities or explain their academic history, they are encouraged to submit additional explanatory materials to strengthen their application.

General Education Requirements

Chatham University requires undergraduate students to complete a minimum of 40 credits of general

education as specified by the Pennsylvania Department of Education. Students transferring to the University who have completed 40 credits of general education at an accredited institution of higher learning will be considered to have completed their general education requirements.

Submission of Credits

All potential transfer credit in progress or completed prior to acceptance to Chatham must be submitted to the University before the student begins courses. This requirement includes all Advanced Placement and International Baccalaureate courses. All official transcripts will be evaluated on an individual basis.

Articulation Agreements

If you are transferring credits, we have Articulation Agreements with a number of schools to make the process easier and your hard work count.

For more information, [click here](#).

Admission Procedures for the Pathways to Nursing Program

Applications for admission to the Chatham University Nursing (Pathways to Nursing) program must include:

- The Chatham University online application
- The supplemental UPMC Shadyside School of Nursing application
- High School transcripts showing graduation date and 2 years of science with related lab coursework
- Post-secondary Education: all transcripts must be submitted
- Completion of the following high school courses with a “C” or higher
 - 4 years of English
 - 2 years of Science (Biology or Chemistry) with a related Laboratory
 - 2 years of Mathematics (1 of which is Algebra)
 - 3 years of Social Studies
- High school GPA of 3.0 or greater
- SAT > 1050 or ACT > 21 or TEAS test score of 62% or higher. [Offered by ATI](#) and required for admission to UPMC Shadyside School of Nursing.

If accepted for admission to [UPMC Shadyside School of Nursing](#), receive a written offer of acceptance. To reserve a space in the incoming class, the candidate must acknowledge acceptance in writing per the letter offering admission to the school.

Once accepted to Nursing (Pathways to Nursing), all students are required to satisfy the requirements for participation in clinical rotations including background checks and a health screening, and a current CPR certification.

All students will be provided a current checklist detailing documentation to be provided and the respective submission deadlines when attending a post-acceptance UPMC Shadyside School of Nursing Information Session.

Students not meeting the requirements to enter or remain enrolled in the UPMC Shadyside School of Nursing Program will receive written notification from the School of Health Sciences Dean's office advising them to select an academic major other than Nursing (Pathways to Nursing). Students are required to complete appropriate documentation to secure a different academic major and advisor. The University Registrar's Office will automatically change the student's major to “undeclared” and assign a new advisor if the appropriate documentation is not completed within the timeframe designated in the notification letter.

Post-Acceptance Information Session/New Student Orientation

Attendance at a post-acceptance information session/new student orientation is required once the offer of admission has been accepted. Topics covered at these sessions include: academic schedules, photo ID cards, and compliance requirements.

For more information, [click here](#).

Admission Requirements for the RN to Bachelor in Nursing

Applicants must:

- Complete the [online application](#)
- Submit proof of completion of an RN degree (Associate or Diploma) with a minimum 2.0 GPA
- Submit a copy of a current unencumbered RN license
- Submit a copy of official transcripts of all completed post-high school education from all schools attended

For more information, [click here](#).

Undergraduate Test-Optional Admission

Chatham University Undergraduate Admission is Test Optional

- No SAT or ACT test scores are necessary to receive full admission review.
- All special programs will waive test score requirements this year; this includes honors, integrated degree programs (IDPs) and all premier scholarship programs. A well written essay and one letter of recommendation is optional but strongly recommended to complete the application.
- First-year student admission is for applicants entering directly from high school, without enrolling in prior post-secondary course work (other than courses completed while attending high school).

The Office of Admission reviews each application in its entirety using a holistic review process to determine whether a student will thrive at Chatham. Since not all students showcase their abilities in the same way, each application is given careful consideration before an admission decision is reached.

First-year student applicants must submit the following:

- Completed [application for admission](#)
- Official high school transcripts

Recommended:

- Essay or writing sample
- One or more letters of recommendation from guidance counselor or teachers.

For more information, [click here](#).

Admission Procedures for Integrated Degree Program (IDP) and Collaborative Programs

The Integrated Degree Program (IDP) allows Chatham University undergraduates the unique opportunity to integrate their undergraduate program with their desired Chatham graduate program. All first-year and transfer applicants are invited to apply to an IDP, as well as current Chatham undergraduate students who are performing well in their academic program(s). IDP benefits may include:

- Less of a financial commitment
- A faster track to graduate program completion
- Guaranteed or preferred admission to competitive graduate programs with limited seats

For more information, [click here](#).

Graduate Admission

The Office of Admissions is your resource to answer questions about Chatham University, to assist you in the application process, and to help you make the most informed decision possible about your college education.

Information for Graduate Admission for on campus grad students, online grad students and international grad students can be found [here](#).

Deferred Entrance

DEFERRED ENTRANCE

Occasionally a student may wish to defer his or her entrance following their initial admission. A student who wishes to defer entrance who has submitted a non-refundable deposit for enrollment should contact the admission office to confirm the deferment. A student may defer entrance into his or her program for up to a year after the original start date. A student may defer one time only. After the year has passed, the student will be required to reapply.

A nursing student who wishes to defer entrance may defer entrance into the MSN or DNP program for up to the next program start date after the initial start date. A nursing student may defer one time only.

Please visit online program pages for current, detailed admission requirements for each program.

International Graduate Admission

Admission information for citizens of a country other than the United States applying to a graduate program at Chatham can be found [here](#).

Graduate Conditional Admission

Admission information for those applying to an on-campus graduate program can be found [here](#).

Online Admissions

Admission information for those applying to an online graduate program can be found [here](#).

Non-Degree Seeking Admission

At Chatham it's possible to take up to 24 credits in an undergraduate program or 12 credits in a graduate program as a non-degree-seeking student. [Apply here](#). If you're looking to quickly acquire valuable skills, Chatham also offers affordable, 12-credit [online graduate certificates](#) in Healthcare Informatics, Healthcare Analytics, Telehealth, Travel Writing and Nurse Educator. For more information, [click here](#).

Office of Financial Aid

Our Mission: To provide information, support, and resources necessary to help both current and prospective students finance their Chatham University education.

Chatham University offers both need-based financial aid and merit-based scholarships. More than 98% of our students receive financial assistance from Chatham, with over \$5 million in need-based and merit-based grants and scholarships awarded annually!

To read more about the Office of Financial Aid, [click here](#).

Financial Aid Staff

To learn more about our Financial Aid staff, please [click here](#).

Types of Financial Aid

With financial aid at Chatham, there are lots of ways to pay for college.

Chatham's dedicated financial aid counselors are here to help all students to understand their options in financing their education. Even after you graduate, we are still here to help you with any of your loan repayment questions.

International students may borrow a private non-federal loan if they are credit approved with a creditworthy United States citizen as a cosigner.

For more information on types of Financial Aid at Chatham, please [click here](#).

Extended Benefits Program

Information for Extended Benefits at Chatham can be found [here](#).

Yellow Ribbon Program

Chatham University is pleased to announce its participation in the [Yellow Ribbon GI Education Enhancement Program](#) (Yellow Ribbon Program). A provision of the [Post-9/11 Veterans Educational Assistance Act of 2008](#), the program provides matching funds from the [Department of Veterans Affairs](#) as a supplement to the Post-9/11 GI Bill®. The Post-9/11 GI Bill covers tuition and fees not to exceed the maximum in-state tuition & fees at a public Institution of Higher Learning. The Yellow Ribbon Program covers tuition and mandatory fees and does not include room and board or books and supplies which are provided for separately under the Post-9/11 GI Bill. These benefits will replace merit scholarships awarded at the time of acceptance.

Individuals may be eligible if they:

- Served an aggregate period of active duty after September 10, 2001, of at least 36 months;
- Were honorably discharged from active duty for a service-connected disability and served 30 continuous days after September 10, 2001;
- Are dependents eligible for Transfer of Entitlement under the Post-9/11 GI Bill based on a veteran's service under the eligibility criteria listed above.

There is no minimum number of credit hours required for participation and awards will continue in subsequent years in which the student maintains satisfactory progress, conduct, and attendance.

If eligible, students should apply for Benefits under the Post-9/11 GI Bill with the Department of Veterans Affairs upon acceptance. Please forward your Certificate of Eligibility to the Office of the Registrar to be considered for the Yellow Ribbon Program. Please visit the [Department of Veterans Affairs website](#) for additional information.

GI Bill® is a registered trademark of the [U.S. Department of Veterans Affairs](#) (VA). More information about education benefits offered by VA is available at the [official U.S. government website](#).

Return of Title IV Funds

To remain eligible for Federal student aid during the semester, the student must be attending classes, taking exams and completing required course work.

The United States Department of Education requires the University to determine the amount of Title IV (Federal aid) earned by a student who withdraws (officially or unofficially) or fails to complete the payment period (semester/module). The University must determine the earned and unearned portions of Title IV aid as of the date the student ceased attendance based on the period of time in which the student was enrolled during the semester. We are required to perform a Return of Title IV Funds calculation for students who withdraw (officially or unofficially) from all classes, or receive failing grades in all courses in a semester.

The calculation required determines a student's earned and unearned Title IV aid based on the percentage of the payment period completed by the student. The percentage of the period that the student remained enrolled is derived by dividing the number of days the student attended by the number of days in the payment period. Calendar days (including weekends) are used, but breaks of at least 5 days are excluded from both the numerator and denominator.

Until a student has passed the 60% point of a payment period, only a portion of the student's aid has been earned. A student who remains enrolled beyond the 60% point is considered to have earned all awarded aid for the payment period. Please note students who are enrolled in modules, or courses which do not span the entire length of a semester, would also be included in this calculation.

The following earned Federal aid is included in a Return of Title IV Funds Calculation if disbursed or could have been disbursed:

- Federal Pell Grant
- Iraq and Afghanistan Service Grant
- TEACH Grant
- Federal SEOG
- Direct Loans
- Federal Perkins Loans

The unearned portion of Federal student aid funds will be returned to the appropriate aid program(s). The funds are returned in the following order:

- Unsubsidized Direct Loans
- Subsidized Direct Loans
- Federal Perkins Loan
- Direct PLUS Loans

- Federal Pell Grants for which a return is required
- Federal SEOG Grant for which a return is required
- TEACH Grants for which a return is required
- Iraq and Afghanistan Service Grant, for which a return is required

Students withdrawing from classes are responsible for payment of any balance due after the required return of Federal student aid funds.

Earned aid is not related in any way to institutional charges. In addition, the University's institutional refund policy and Return of Title IV Funds procedures are independent of one another. A student who withdraws from a course or courses may be required to return unearned aid and still owe the university for the course or courses. For more information on Chatham University's withdrawal and institutional charges' policies, please consult the catalog.

Students who stop attending all classes without officially withdrawing will be subject to a return of Federal student aid funds at the end of the semester based on the withdrawal date/last documented date of attendance as determined by Chatham University.

Office of Financial Aid Code of Conduct

Financial Aid staff members are responsible for adhering to principles of good practice as mandated by state, federal, and institutional regulations, including the Policy for Ethical Practice. Financial Aid staff, as well as officers, trustees, and employees of Chatham University who make financial aid decisions for the University must adhere to the following professional standards.

- Refrain from taking any action for his or her personal benefit.
- Refrain from taking any action he or she believes is contrary to law, regulation, or the best interest of the students and parents he or she serves.
- Ensure that the information he or she provides is accurate, unbiased, and does not reflect any preference arising from actual or potential personal gain.
- Be objective in making decisions and advising Chatham University regarding relationships with any entity involved in any aspect of financial aid.
- Refrain from soliciting or accepting anything of other than nominal value from any entity involved in the making, holding, consolidating, or processing of student loans, including anything of value (including reimbursement of expenses) for serving on an advisory body. This includes, but not limited to, gifts such as travel, hotel or motel lodging, entertainment, restaurant meals, office supplies, and event tickets.
- Disclose in such a manner as Chatham University may prescribe, any involvement with or interest in any entity involved in any aspect of student financial aid.
- Institutional award notifications and/or other institutionally provided materials shall include the following:
 1. A breakdown of the individual components of the institution's Cost of Attendance, designating all potential billable charges.
 2. Clear identification of each award, indicating type of aid, i.e. gift aid (grant, scholarship), work or loan.
 3. Standard terminology and definitions.
 4. Renewal requirements for each award.
- All required consumer information is displayed in a prominent location on the Chatham University website and in any printed materials, easily identified and found, and labeled as "Consumer Information."

Refrain from discussing options for or recommending any lender for private loans.

Federal Financial Aid Drug Law Violation Policy

Per Federal Regulations, a federal or state drug conviction can disqualify a student for federal financial aid. A student who has been convicted of possession or sale of illegal drugs loses Title IV eligibility for a period of time specified by law. The period of ineligibility depends on whether the conviction was for possession or sale of (including conspiring to sell) illegal drugs. Title IV aid includes federal grants, loans and work study. The steps to regain eligibility are listed below.

For convictions involving possession, the periods of ineligibility are as follows:

- One conviction: one year after the date of conviction
- Two convictions: two years after the date of the second conviction
- Three or more convictions: indefinite from the date of the third conviction

For convictions involving sale, the periods of ineligibility are as follows:

- One conviction: two years after the date of conviction
- Two or more convictions: indefinite from the date of the second conviction

Convictions only count if they were for an offense that occurred during a period of enrollment for which the student was receiving Title IV aid - they do not count if the offense was not during such a period. Also, a conviction that was reversed, set aside, or removed from the student's record does not count, nor does one received when the student was a juvenile, unless the student was tried as an adult.

Regaining Eligibility

A student regains eligibility the day after the period of ineligibility ends or when the student successfully completes a qualified drug rehabilitation program. Further drug convictions will make the student ineligible again.

A student whose Title IV eligibility has been suspended indefinitely may regain eligibility only by successfully completing a drug rehabilitation program. A student who is under a one- or two-year penalty may regain eligibility before the expiration of the period of ineligibility by successfully completing a drug rehabilitation program. If the student successfully completes an approved drug rehabilitation program, eligibility is regained on the date the student successfully completes the program. It is the student's responsibility to certify to the school that he/ she has successfully completed the rehabilitation program.

To qualify the student for eligibility, the drug rehabilitation program must include at least two unannounced drug tests, and:

- Have received or be qualified to receive funds directly or indirectly under a Federal, State, or

local government program; or

- Be administered or recognized by a Federal, State, or local government agency or court; or
- Have received or be qualified to receive payment directly or indirectly from a Federally- or State-licensed insurance company; or
- Be administered or recognized by a Federally- or State-licensed hospital, health clinic or medical doctor.

Undergraduate Financial Aid Programs

For more information on Undergraduate Financial Aid Programs, [click here.](#)

Additional Resources for Undergraduate Students

Explore more options available to you listed in the following free scholarship databases by [clicking here](#).

Loan Information

Federal Loans are available to United States citizens and permanent residents only. In addition to a valid FAFSA students must be enrolled at least part time in a degree seeking program. Federal student loans can only be used for the completion of degree requirements.

After exhausting the opportunities available from the federal aid programs, many students will consider private loan programs as a source of funding. As always, taking on debt for any reason should be done deliberately and only for the amounts needed. Additional information regarding the availability of federal student aid is available from the Department of Education publication, [Federal Aid First](#).

More Information for Undergraduate Federal Loans, Private Loans & Payment Options can be found [here](#).

Scholarships

Chatham University, in an effort to recognize academic excellence, awards scholarships to deserving incoming full-time students.

To qualify for a Chatham Scholarship, students must complete an admissions application, be granted acceptance to the University, and, in some cases, interview or audition. In addition, Chatham offers generous need-based financial aid. Students must complete the [Free Application for Federal Student Aid \(FAFSA\)](#) in order to determine need-based aid. No other forms are required.

More Information for Undergraduate Scholarships & Grants can be found [here](#).

International Students

Chatham University, in an effort to recognize academic excellence, awards scholarships to deserving incoming full-time students.

More Information on International Undergraduate Financial Aid Programs can be found [here](#).

Graduate Financial Aid

Chatham provides several ways to help fund your graduate degree. The resources on this page will guide you through the various funding opportunities available to students.

For more information on Graduate Financial Aid Programs, [click here](#).

Financial Aid Overview for Graduates

With financial aid at Chatham, there are lots of ways to finance graduate school.

Chatham's dedicated financial aid counselors are here to help all students to understand their options in financing their education. Even after you graduate, we are still here to help you with any of your loan repayment questions.

For More Information about Graduate Financial Aid Overview, [click here](#).

Assistantships

Chatham provides several ways to help fund your graduate degree. The resources on this page will guide you through the various funding opportunities available to students.

For more information about Graduate Assistantships, [click here](#).

Tuition Reduction

Chatham provides several ways to help fund your graduate degree. The resources on this page will guide you through the various funding opportunities available to students.

For more information Graduate Tuition Reduction, [click here.](#)

Office of University Registrar

The Registrar's Office is responsible for overseeing all aspects of academic records. We process and maintain the following: academic transcripts, course scheduling, transfer credit evaluations, student demographic information updates, registration related activities, degree completion, classroom reservations, student enrollment verifications, course catalogue, and Family Educational Rights and Privacy Act forms that allow the release of student record information. **To read more about the Registrar's Office, [click here](#).**

Access to Student Educational Records FERPA

The Family Educational Rights and Privacy Act of 1974 ("FERPA") was enacted to protect the privacy of a student's educational records, to establish the rights of students to inspect and review their educational records, and to provide procedures for the correction of inaccurate or misleading data through informal and formal hearings. Chatham University has adopted an institutional policy regarding FERPA. Copies of this policy may be found in the Office of the University Registrar. The Office of the University Registrar also maintains a Record Retention policy that lists the types of education records maintained by the University. FERPA affords students certain rights with respect to their educational records. Those rights are:

1. The right to inspect and review the student's educational records within 45 days after the University receives a request for access. Students should submit to the University Registrar or other appropriate University official a written request that identifies the record(s) they wish to inspect. Forms for such a request are available from the Office of the University Registrar. The University Registrar or other appropriate official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student to whom the request should be addressed.
2. The right to request the amendment of the student's educational record(s) that the student believes to be inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. Forms for such a request are available from the Office of the University Registrar. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is defined as a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection

agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee; or a person assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the University may disclose educational records without consent to officials of another school in which the student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Chatham University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

Another exception in FERPA which permits disclosure without consent pertains to disclosure of "directory information" unless the student has taken steps to withhold "directory information" from disclosure. Directory information is defined by Chatham University to include the following:

- Name, local address, permanent address, Chatham e-mail address, local telephone number, permanent telephone number, date and place of birth, major field of study, honors and awards (e.g. Dean's List recognition), participation in and photos of officially recognized activities and sports, height and weight of members of athletic teams, photograph, class year, enrollment status (including current enrollment, dates of attendance, full-time/part-time, withdrawn), degrees conferred, dates of conferral, graduation distinctions, and the institution attended immediately prior to admission to Chatham.

Please contact the Office of the University Registrar for more information concerning the release and/or withholding of "directory information." The following documentation is provided by Chatham so that a student may ascertain his or her progress:

1. Student grades can be accessed via the Web. This grading page is considered an official document from Chatham University from our secure website that is password protected. Students who are not currently enrolled and whose student accounts are past due will NOT be able to access the grading page.
2. The student's advisor has access to the student's academic record via the Web. This academic record page is from our secure website that is password protected. Access is granted for advising purposes only, and the record is not to be released to a third party.

Under unique circumstances, the disclosure of a student's educational or health information is permissible and protected by FERPA, including to the following:

- To persons in an emergency if necessary to protect the health or safety of the student or other persons.

- To parents, if the student is dependent under the Internal Revenue Code.
- To parents, regarding a student's use or possession of alcohol or controlled substance if the student is under 21, and has committed a disciplinary violation due to such use possession or being present when underage drinking is taking place.
- To victims of a crime of violence or sex offense, the final results of an internal disciplinary proceeding relating to such crime or offense.

Treatment records and privileged communications with doctors, psychologists, or counselors may be disclosed if:

- The patient or client presents a serious and imminent danger to himself or herself.
- The patient or client has explicitly threatened to kill or inflict serious bodily injury upon another person and has the apparent intent and ability to carry out the threat.
- The physical or emotional abuse or neglect of a child under the age 18, or an elderly or handicapped person is suspected.

Adding and Dropping Courses

In consultation with their advisors, students may add or drop courses until the end of the add/drop period for the semester (see the Academic Calendar). If a course is closed, the student must obtain the instructor's signature on the add/drop/course withdrawal form available online under Documents & Forms on [myChatham](#) or in the University Registrar's Office.

UNDERGRADUATE

After the conclusion of the add/drop period, students wishing to add, drop, or change the grading option on a course must petition the appropriate academic dean by way of a retroactive petition (see section below).

GRADUATE

After conclusion of the add/drop or withdrawal period, all change requests must be approved by the program director and appropriate academic dean by way of a retroactive petition (see section below).

Auditing Courses

The course audit option is restricted to Chatham courses, undergraduate or graduate level, and does not apply to independent studies. No credit is granted for course audits, and an AU will be recorded on the transcript as the grade. When a course audit option is selected, the student may be required to participate in class discussion, do practicum work, submit written work, and take examinations.

UNDERGRADUATE

Full-time students may audit a course by obtaining permission from the instructor and completing a course audit application available from the University Registrar. Audits must be declared at the point of registration. Courses for major or minor credit may not be audited. General Education credits may not be audited.

GRADUATE

Students in health science programs generally may not audit courses except for special circumstances approved by the instructor and Program Director. Non-health science programs graduate students may audit a course by obtaining permission from the instructor and completing a course audit application.

Change of Grade

A student who questions his/her grade should confer with the instructor of the course. If he/she agrees that the grade is incorrect, the instructor corrects the grade using the Grade Change application on myChatham. Once the grade has been updated, usually within three business days, the student will be able to view the change on their unofficial transcript.

All grade changes must be made within one year after the end of the semester in which the course was taken. After one year, the burden of proof falls on the student to submit information which speaks to an administrative error.

Cross-registration PCHE

Chatham University students may take advantage of a wide variety of both undergraduate and graduate courses, programs, and opportunities available through the following institutions that, along with Chatham, form the Pittsburgh Council of Higher Education (PCHE): Carlow University, Carnegie Mellon University, Community College of Allegheny County, Duquesne University, La Roche College, Robert Morris University, Pittsburgh Theological Seminary, Point Park University, and University of Pittsburgh. Cross-registration permits full-time students to take courses at any other PCHE institution without additional tuition charges. To be eligible, a student must have completed at least 24 credits, have a minimum cumulative GPA of 2.0 and they cannot be in their first or last semester of study. Both Chatham and the other institution must approve the course to be taken prior to registration. Students can register for no more than one course per term. Grades from such courses will transfer to their Chatham records. Additional information on cross-registration may be obtained from the University Registrar's office.

Cross-registration OCICU

Chatham University students may take advantage of a wide variety of both undergraduate and graduate online courses and programs available through (12) regionally accredited, independent, not-for-profit online institutions that, along with Chatham, form the Online Consortium of Independent Colleges and Universities (OCICU): Regis University, Saint Leo University, Southern New Hampshire University, Robert Morris University, Seton Hill University, University of San Francisco, and others. Cross-registration permits students to take courses at any other OCICU institutions without additional tuition charges. To be eligible, a student must have completed at least 24 credits, have a minimum cumulative GPA of 2.0 and they cannot be in their first or last semester of study. Both Chatham and the other institution must approve the course to be taken prior to registration. Students can register for no more than one course per term. Grades from such courses will transfer to their Chatham records. Additional information on cross-registration may be obtained from the University Registrar's office.

Degree Conferral

APPLICATION FOR DEGREE CONFERRAL

Applying for Degree Conferral is a mandatory step that all students (undergraduate, graduate, and doctoral) must take in order to be awarded their degree and receive their diploma. There is a fee involved. Your application triggers a review of your degree progress by your program/advisor. If we are alerted that you are not approved and have additional requirements to fulfill, you will be notified via email. **All grades must be received before anything is finalized.**

HOW TO SUBMIT AN APPLICATION FOR DEGREE CONFERRAL TO RECEIVE YOUR DIPLOMA

1. In myChatham under My Tools look for the button [APPLICATION FOR DEGREE CONFERRAL](#). If the date you seek is available, then you are done and should alert your advisor to your application. If you do not see the date that you would like, it means the deadline has passed. Proceed to next step.
2. If the date you want is not listed as an option, please select an available date OR LATE APPLICATION and proceed to the next step.
3. Fill out a [RETROACTIVE PETITION FORM](#) and circle the conferral month you seek on the form and sign it. . This form can be found on myChatham/ Documents and forms and can also be downloaded directly from the application page. Proceed to next step.
4. Return the form to the University Registrar's office either via fax at (412) 365-1643 or by taking a photograph of the signed form with a smart phone and attaching it to an email to University_Registrar@chatham.edu. Please be sure the signature is visible.
5. IF APPROVED: the University Registrar's office will be able to adjust your application to reflect the conferral month you've circled on your petition. You will be notified via email when this has taken place. Please do not contact this office during the review period, you will not receive a response.

Final Examination Schedule

The undergraduate final examination schedules for fall and spring semesters are produced by the University Registrar's Office and follow a Monday-Thursday schedule. Maymester and summer terms do not have final examination weeks

Final Grades

After faculty members submit grades, they will be available for viewing on myChatham under [My Grades](#). All grade inquiries should be directed to the faculty member.

Grade Point Average

A student's grade point average (GPA) is calculated after the completion of each term; both cumulative and term GPAs appear in the student's grade report and transcript. Pluses and minuses are included in the calculation. If a student earns an F grade in a course taken on a pass/fail basis, the F is included in the grade point calculation; P grades do not affect the GPA.

UNDERGRADUATE GRADES

Grade	Grade Point Value	Description
A	4.00	Excellent
A-	3.67	
B+	3.33	Good
B	3.00	
B-	2.67	
C+	2.33	Satisfactory
C	2.00	Minimal performance
C-	1.67	
D+	1.33	
D	1.00	
D-	0.67	
F	0.00	Unsatisfactory performance, no credit
I		Incomplete work in a course
M		Military leave of absence
P		Pass, minimal value C+
W		Withdrawal from a course, no credit
CR		Credit earned for Prior Learning Assessment
NS		No show, no credit
TR		Transfer credit

GRADUATE GRADES

Grade	Grade Point Value	Description
A	4.00	Excellent
A-	3.67	

B+	3.33	Satisfactory
B	3.00	
B-	2.67	
C+	2.33	Course must be repeated
C	2.00	Course must be repeated
C-	1.67	Course must be repeated
D	1.00	Course must be repeated
F	0.00	Unsatisfactory performance, no credit
I		Incomplete work in a course
M		Military leave of absence
P		Pass, minimal value B-
W		Withdrawal from a course, no credit
CR		Credit earned for Prior Learning Assessment
NS		No show, no credit
TR		Transfer credit

Graduate Continuing Registration Credit

All graduate students are required to continuously register for a Graduate Continuing Credit during the time they are completing their final project, thesis, practicum, fieldwork or clinical placement and are no longer taking any other formal courses through Chatham. Additionally, this one credit requirement is applicable to any student who requests an incomplete grade in their final project, thesis practicum, fieldwork or clinical placement for the purpose of receiving a time extension.

Students who are registered for this credit will receive an incomplete grade for this work, and a passing or failing grade for the Graduate Continuing Credit. Once they receive a passing grade for the Graduate Continuing Credit, the incomplete grade will be changed to the appropriate grade. Failure to register for the Graduate Continuing Credit during the subsequent semester's add/drop deadline will result in a failing grade for the final project, thesis, practicum, fieldwork or clinical placement course.

Incomplete Grades

An incomplete grade may be given to a student when a documented illness or another documented extenuating circumstance legitimately prevents the completion of course requirements. An incomplete is not given as a substitute for a failing grade or to invalidate an instructor's attendance policy. Unless the instructor stipulates a shorter time period for completion of the work, an incomplete must be satisfied by the established date on the University's Academic Calendar. Incomplete grades which are not satisfied by the established deadline will convert to the grade of F. Once an incomplete grade has been converted to an F grade, it cannot be reversed, but it can be changed to another letter grade if it falls within the one year deadline for grade changes. If the incomplete is satisfied by the established deadline, a regular letter grade will be recorded upon notification by the instructor to the University Registrar's Office. It is important to note that as long as the "I" is on the record for a course, a student may not enroll for credit in any course that has that course as a stated prerequisite, and **the student cannot graduate.**

Students who believe they can demonstrate a legitimate need for an incomplete must have instructor's approval. The instructor may ask the student to complete an incomplete grade contract which is available under Documents and Forms on myChatham. An incomplete grade contract helps to establish the terms of the arrangement. If the student is asked to complete the contract, once it's completed the student should return it to the appropriate Academic Dean's Office for forwarding to the instructor.

To be eligible to receive an incomplete grade, a student must have regularly attended class meetings in accordance with the instructor's attendance policy, completed all assignments by the instructor's stated deadlines, and maintained a passing grade of at least "C-" for undergraduate courses, and "B" for graduate courses. The deadline for requesting an incomplete grade is the last day of classes for the semester in which the course was taken.

***The only exception to this policy is for graduate students who are enrolled in graduate continuing credit courses.**

Integrative Capstone Grading Regulations - Undergraduate

No incomplete grades will be given in the integrated senior capstone course except in unusual and extreme circumstances that prevent the student from completing the work of the course and that can be confirmed by authoritative documentation. Requests for incomplete grades should be directed to the appropriate academic dean, who will make the decision in consultation with the faculty member.

Midterm Grades - Undergraduate

All midterm grades are available for viewing on myChatham under [My Grades](#). These grades will not become a part of the student's permanent record. The date is available on the [Academic Calendar](#).

Pass/Fail Grades

UNDERGRADUATE

With the guidance of an advisor, a student may decide to take a course on a pass/fail basis rather than under the traditional grading system. The election of the pass/fail option must be declared at the time of registration. For a cross-registered course, students must declare the pass/fail option to the Chatham University Registrar within two weeks of the beginning of the course. Students may enroll for no more than 30 pass/fail credits during their studies at the University. General education, major and minor courses may not be taken pass/fail. Exceptions to pass/fail grades within a major or minor include internships, certain Chatham Abroad and lifetime activity courses in the wellness program. Students choosing to take courses on a pass/fail basis will be graded as follows:

P = Pass, minimal value C+

F = Unsatisfactory, no credit

An F earned in a pass/fail course is calculated into the grade point average (GPA); P grades do not affect the GPA.

GRADUATE

In some graduate programs, certain courses may be offered as pass/fail rather than under the traditional grading system. A failing grade is calculated in the grade point average (GPA); a P earned is not calculated in the GPA and must represent work earned at a grade of B- or above.

Posting of Academic Honors

Academic honors also are conferred at Commencement as follows: cum laude: a cumulative average of 3.5 to 3.74; magna cum laude: a cumulative average of 3.75 to 3.89; summa cum laude: a cumulative average of 3.9 to 4.0. A student must complete at least 60 credit hours at Chatham to qualify for consideration for academic honors.

Registration

All registration, adding, and dropping of courses occurs online. Students must register for classes on the dates indicated on the [Academic Calendar](#). Registration after these dates may significantly reduce the availability of classes open for enrollment. Continuing students who register for classes after the open registration published deadline may be assessed a non-refundable fee. Please see the Financial Aid and Student Accounts sections for information pertaining to the financial implications of registration and schedule adjustments. In addition to the calendar, graduate students should review the Institutional Refund Policy.

Repeating Courses

Upon completion of a repeated course, only the course credit(s) and the grade for the most recent attempt will be computed in the GPA. If a student withdraws from a repeated course, the withdrawal course will appear on the transcript, and the previous grade earned will continue to be counted in the GPA.

UNDERGRADUATE

When available, students may repeat courses. Students may attempt a single course no more than three times, including attempts that result in a withdrawal. Whenever a course is repeated, the academic record and transcript reflect all course enrollments and the grade earned for each enrollment.

GRADUATE

When a student earns a grade lower than B-, the course must be repeated if the course is required as part of a degree program. In extenuating circumstances, a department chair or program director, with the dean's approval, may substitute another course of similar content. Additionally, no course may be repeated more than twice.

If the repeated grade earned is less than B-, the student will be dismissed.

Retroactive Petitions

Students who fill out a retroactive petition are requesting consideration for failing to meet an established University deadline. This petition should accompany the form which the student would have submitted if the request had been before the deadline. For example, to add a course after the add/drop deadline the add/drop form, signed by the Academic Dean, should accompany the request. Additionally, a student should include a written statement and supporting documentation explaining why the deadline was missed. All retroactive petitions go before an approval committee. Students will be notified of the committee's decision via email. There is no appeals process for all committee decisions are **final**.

Student Attendance

Every student enrolled at Chatham accepts the responsibility to attend all required class meetings. To obtain the fullest benefit from their courses, students must participate actively. This means attending regularly, engaging in course activity, completing work on time, and making up work missed because of an emergency absence. It is the student's responsibility to let the course instructor know within the add/drop period if he or she will have to miss class for religious reasons, athletics, or other. In regards to online courses, students are responsible for logging in regularly, engaging in course discussions and other activity, and completing work on time.

Attendance for final examinations is mandatory. Students who are unexcused from a final examination will receive a failing grade for that examination. The appropriate academic dean may excuse absences only in the case of a documented illness or other serious emergency.

Transcripts

Current and former students whose student accounts are in good standing may request an official copy of their University records. A fee is charge per transcript ordered, and additional processing fees are charged for each address. Students whose accounts are delinquent cannot receive official transcripts until accounts are paid in full, including possible late fees and collections costs.

Current Students: Should use the Self-Service tool on [myChatham](#) or in the [student portal](#) to order a transcript to avoid having to sign and submit a release form. By securely logging in to one of those systems, you are authenticating your identity.

Former Students: Should visit www.transcriptsplus.net/order to place an order. Orders are authorized via electronic signature and you need to include your social security number or your Chatham student number.

Verifications

GENERAL

After the start of the semester, general enrollment information can be verified via the National Student Clearinghouse Self-Service portal. Student Self-Service saves you a trip to the University Registrar's Office by providing you with the ability to verify enrollment securely via the Web, 24/7. Student Self-Service is provided through the National Student Clearinghouse, a nonprofit organization serving the higher education community. The enrollment certificate obtained via this service serves in place of an issued letter or completed form. The student may also utilize their personal schedule as additional verification of enrollment. This can be accessed and printed via [myChatham/MySchedule](#). All third party requestors and former students can verify degree information and/or attendance dates by using the National Student Clearinghouse degree verify option.

PROGRAM SPECIFIC

If you are in need of specific verification information for professional licensure or certification, please contact the appropriate department.

Education

Occupational Therapy

Physician Assistant

Physical Therapy Psychology

Withdrawal from Courses

After the add/drop period, students have the option to withdraw from a course until the last day to withdraw deadline as posted on the Academic Calendar. A grade of W will be recorded on the transcript. This action must be completed by way of the add/drop/course withdrawal form available online under Documents & Forms on [myChatham](#) or in the University Registrar's Office.

Office of Student Accounts

The Office of Student Accounts primary responsibility is to ensure that all tuition, room, board, and fees due the University are billed, collected, posted, deposited and reconciled timely and accurately in a manner that complies with University Policy as well as all Federal and State regulations. We strive to provide outstanding service while also maintaining a high level of integrity and professional ethic. **To read more about the Office of Student Accounts, [click here](#).**

Billing and Monthly Account Statement

The Office of Student Accounts will generate and mail term invoices to all registered students approximately a month prior to the start of the semester. Invoices will be in the student's name and sent to their billing address on file. Important financial and payment information will be included with the invoice. The invoice will list a payment due date, generally the 15th of the month, in which your student account must be paid. Monthly account statements will continue to be sent to those students with remaining balances. The statement will show all University charges and credits for the previous month, as well as any unpaid financial obligation to the University. Failure to pay the amount due by the due date listed on the statement will result in a late payment fee and a financial hold on the account.

Past Due Accounts

A student account is considered past due when a scheduled payment is not paid by the required due date. The following actions may be taken against any student with a past due account:

- Place the student on financial hold
- Withdraw all charging privileges
- Withhold grades
- Withhold transcripts
- Withhold statement of transfer in good standing
- Cancel dining hall privileges
- Request that a student vacate campus housing
- Withhold the ability to register for future terms
- Cancel the student's current registration at the University
- Withhold receipt of the degree
- Withhold participation in graduation ceremonies
- Garnish work-study wages
- Place the account into collections; charging the student all related collection costs and reporting the default to all national credit bureaus and other appropriate non-campus organizations.

For more information, [click here](#).

Corporate Payment Options

Chatham University is pleased to offer several corporate related payment options. These payment options are available for any student employed at a company offering tuition assistance benefits. Payment options are offered year round, however, students must enroll each term they wish to participate. Enrollment in any of the Corporate Payment Options is free provided a completed application and all required documents are received each term by the add/drop deadline. Applications received after the term add/drop deadline will be charged a \$50 late processing fee. To enroll in any of the Corporate Payment Options students must be registered for classes and be in good financial standing with the university. **To view available payment options, please [click here](#).**

Withdrawal Calculation Policy

A Withdrawal Calculation Policy has been established for those students who process a complete Withdrawal (all classes) from the University. Adjustments are for Tuition only; nonrefundable Deposits and Fees are not adjusted or refunded. To be entitled to a withdrawal calculation, a student must give the University written notice of complete withdrawal. Non-attendance and/or non-payment of Tuition and Fees do not constitute an official withdrawal. No adjustments will be made for students who process a course withdrawal (one or more classes as opposed to all classes). Institutional withdrawal calculations for complete withdrawals are made according to the following schedules:

For All Sessions(calculations are based on Calendar Days including weekends and holidays):

- Day 1 through Day 7 of the session is 100% refund
- Day 8 through Day 15 of the session is 50% refund
- Day 16 of the session and beyond is 0% refund

Withdrawal calculations for charges in Room and Board for students who Withdraw will be calculated based on usage and students will be charged a pro-rated amount based on housing check-in/check-out dates and meal plan usage. The dates used for this calculation are based on the Terms and Conditions of Residency contract dates and the dates students check-out and return their residence hall or apartment keys to the Office of Residence Life and stop utilizing their Chatham ID to access their residential space. Students sign the Terms and Conditions of Residency for one Academic Year (two semesters). If a student chooses to live off-campus for the second semester, they must notify the Office of Residence Life by December 1st, otherwise they will be subject to either a \$300.00 Cancellation Fee or the total cost for Room and Board for the Spring semester.

After the withdrawal calculation is applied, any resulting balance is due upon Withdrawal. Any resulting Credit Balance will be refunded within 14 days. For the purpose of computing any withdrawal calculation, a student's withdrawal date is the date the student initiates the withdrawal process by filing an official Notice of Withdrawal with the Office of the University Registrar.

For more information, [click here](#).

Chatham Tuition & Fees

Tuition Installment Plans provide families options to finance charges without interest over the course of the year or term. Each of the plans below have a one-time \$25.00 application fee, which is due at time of enrollment into the plan. Chatham University uses ECSI to process and maintain both of our Tuition Installment Plans.

YEAR-BASED (10-Month) Installment Plan: This plan offers ten equal payments of your remaining balance (after financial aid) over the course of the fall and spring terms. Monthly installments begin on July 15 and continue through April 15.

SEMESTER-BASED (4-Month) Installment Plan: This plan offers four payments of your remaining balance (after financial aid) over the course of either the fall or spring term. Payments for the fall term begin on July 15 and end October 15. Payments for the spring term begin on December 15 and end on March 15.

For more information, [click here](#).

Graduate

Graduate education at Chatham University involves tuition, fees, and expenses associated with lodging, food, insurance, facilities, technology, and travel. We also offer graduate assistantships, fellowships and professional campus work positions that can help make a Chatham graduate education more affordable.

For more information, [click here](#).

Payment Options

With financial aid at Chatham, there are lots of ways to finance graduate school. Here, we go through some of them with you.

To view payment options, [click here](#).

Office of Academic Affairs

The Chatham University experience is dedicated to enabling its graduates to make an impact on the world around them. Students' personal, professional, and leadership skills are developed to their fullest potential through intensive study, internships, study abroad, service learning, leadership training opportunities, hands-on learning, and personal development seminars.

Office of Academic Affairs

- Jenna Templeton, Vice President of Academic Affairs
- Mary Simbari, Executive Administrative Assistant
- Leah Christy, Administrative Assistant
- Lisa Lambert, AVP for Undergraduate Learning
- Pat Downey, Dean, School of Health Science
- Darlene Motley, Dean, School of Arts Science and Business
- Lou Leonard, Dean, Falk School of Sustainability & Environment
- Jill Ausel, Director, Library
- Dana Brown, Executive Director, Center for Women and Politics
- Anne Schlicht, Executive Director, Center for Women's Entrepreneurship
- Giovanni Garofalo, Director, Institutional Research and Effectiveness
- Mark Kassel, Director, Chatham Online
- Cindy Kerr, Director, Office of Academic & Accessibility Resources, OAAR
- Maria Kroniser, University Registrar
- Jessie Ramey, Director, Women's Institute

For more information about the Office of Academic Affairs [click here](#).

Honor Code

Chatham University Honor Code

The Honor Code is intended to foster and strengthen a learning, living, and working community that is committed to excellence in all endeavors, honesty, personal integrity and accountability, and respect for the rights, opinions and well-being of others, and whose members are committed to having these and the other Chatham values inform the choices they make.

Students are expected to familiarize themselves with their responsibilities under the Honor Code. Failure to do so will not constitute an excuse for failing to meet these responsibilities.

The Honor Code is comprised of two distinct policies:

- [Student Behavior and Conduct Policy](#)
- [Academic Integrity Policy](#)

Academic Integrity Policy and Procedures

- [Academic Integrity Policy](#)
- [Academic Integrity Procedures](#)

Chatham University Honor Code

Policy on Academic Integrity

Overview

The Honor Code of Chatham University (“Chatham” or “the University”) sets forth a set of standards of student behavior and conduct that are grounded in the values embodied in Chatham’s Mission and Values Statements as well as other Chatham policies and rules. The Honor Code provides a framework to address allegations that a student (including students, recognized student organizations, athletic teams or other affiliated groups) failed to uphold the standards set forth herein.

The Honor Code is intended to foster and strengthen a learning, living, and working community that is committed to excellence in all endeavors, honesty, personal integrity and accountability, and respect for the rights, opinions and well-being of others, and whose members are committed to having these and the other Chatham values inform the choices they make.

Students are expected to familiarize themselves with their responsibilities under the Honor Code. Failure to do so will not constitute an excuse for failing to meet these responsibilities. The Honor Code is comprised of two distinct policies: **Student Behavior and Conduct Policy** and the **Academic Integrity Policy**. This document specifically focuses on the Academic Integrity Policy.

The purpose of this policy is to outline the academic integrity process in place at Chatham University to identify, report, and adjudicate acts of academic misconduct by students within all academic pursuits at the University.

I. Scope and Jurisdiction

This Policy applies to academic misconduct committed by Chatham students from the moment they accept admission until the moment they graduate or withdraw from the university. Accepting admission is defined as depositing for the upcoming term. A student who chooses to withdraw from the University rather than participate in the Academic Integrity process will still be held accountable for academic misconduct. The University reserves the right to continue the Academic Integrity process even after a student has withdrawn.

Chatham has jurisdiction over Honor Code related matters regarding academic misconduct that occur (i) on campus; (ii) during an official Chatham program or activity (regardless of location); (iii) off campus; (iv) or in an online or virtual space. The Honor Code applies regardless of whether the University is in session.

The University reserves the right to pursue matters through the Honor Code that may also be addressed in the civil or criminal legal system. Proceedings under the Honor Code can happen before, during, or after a civil or criminal proceeding. The University can also refer items to the civil or criminal legal system. Police officers in the Public Safety Department at Chatham University are certified under Pennsylvania Legislative Act 120: Municipal Police Officers Education and Training Act and/or Legislative Act 235: The Lethal Weapons Training Act, and are armed. The officers are sworn in by Allegheny County and have arrest powers as granted by Pennsylvania Legislative Act

501: The Private Police Act. Their jurisdiction includes all Chatham University property and all roads running through and adjacent to the campus. The Department of Public Safety also has the authority to investigate and issue citations for summary offenses and misdemeanors such as certain alcohol and drug offenses, disorderly conduct, etc., and generally will refer these issues to the Honor Code unless it is a more serious issue.

II. Related Definitions Under this Policy

This section serves to define and elaborate upon key terms appearing within the Honor Code.

Academic Integrity Board: Members of the Honor Code Committee who review a case in an Academic Integrity Hearing and who make recommendations to the Dean of the appropriate School(s) in which a student(s) is enrolled.

Academic Integrity Officer: The University official who manages the academic integrity process at the institution and serves as a non-voting ex-officio member of the Honor Code Committee.

Advisor: An advisor is here defined as a university employee who is a current or past member of the Honor Code Committee and who provides guidance through the Honor Code process. The advisor shall not make decisions for the student, but will assist a student in understanding the process, accessing student resources, and if applicable, attend an Academic Integrity Hearing.

Complainant: Complainant is here defined as the individual(s) who put forth the report of alleged academic misconduct that is in violation of the Honor Code.

Disciplinary Status: Disciplinary status is here defined as the resulting change or impact of sanctions upon a student's record and standing with the University, according to the sanctions and outcomes of academic integrity proceedings described herein.

Honor Code Committee: The Honor Code Committee is comprised of faculty and undergraduate and graduate students who assist in the adjudication process for acts of academic misconduct and student behavior and conduct issues.

Informal Resolution Process: The informal resolution process is defined as a form of resolution for academic misconduct infractions which are first-time offenses and/or which fall under categories that would not result in a separation from the University, as outlined in the Procedures section.

Transcript: The official Chatham University record of student academic credit and grades.

Recognized Student Organizations: Recognized Student Organizations are here defined as student groups that have completed the requirements necessary to be recognized by the Office of Student Engagement as active, sanctioned Student Organizations.

Respondent: Respondent is here defined as the individual(s) who has allegedly violated the Honor Code under the academic integrity policy, in other words, the student, students, recognized student organization, or athletic team that is responding to the reported academic misconduct.

Sanctions: Sanctions are here defined as the determined educational and/or disciplinary outcomes as determined by the party or parties who oversee the resolution of reported academic misconduct.

Student Conduct File: The Student Conduct File is here defined as the records (e.g., documents, communications, evidence) that will be retained on all students who participate in the Honor Code process. These records will be retained for seven years and may be used for a student background check or transfer requests.

Student Record: Student record is here defined as the permanent record stored in the Student Information System (SIS). The Student record is used internally and not released to the outside community unless written consent is given by the student.

III. Academic Integrity and Academic Misconduct Under this Policy

The following definitions provided are not all-inclusive but are illustrative of conduct that may breach the above expectations outlined in Section I: Overview, exposing a student, students, recognized student organization, or athletic team to disciplinary proceedings and sanctions, regardless of whether the conduct occurred during an academic term, or on or off campus.

Academic Integrity

Academic Integrity is defined as upholding the tenets of the Chatham University Honor Code of excellence in all endeavors, honesty, personal integrity and accountability, and respect for the rights, opinions and well-being of others as they relate to all academic pursuits at the University.

Academic Misconduct

Academic misconduct is defined as failure to abide by the tenets of the Chatham University Honor Code of excellence in all endeavors, honesty, personal integrity and accountability, and respect for the rights, opinions and well-being of others as they relate to academic pursuits at the University.

Acts of academic misconduct are distinguished by the nature of the act according to the reasonable belief of the instructor and fall into two broad categories – Technical and Substantiated.

Technical acts of academic misconduct are those reasonably believed by an instructor to be purely technical in nature and/or without intent to achieve an academic advantage. Technical acts include, but are not limited to incorrectly citing, paraphrasing, and attributing sources within an academic course or exercise. Technical acts of academic misconduct do not present egregious and blatant attempts to use or share sources or other materials in a manner consistent with substantiated acts of academic misconduct.

Substantiated acts of academic misconduct are those reasonably believed by an instructor to achieve an academic advantage and violate the tenets of the Chatham University Honor Code of excellence in all endeavors, honesty, personal integrity and accountability, and respect for the rights, opinions and well-being of others as they relate to academic pursuits, including research and internships, at or affiliated with the University. Substantiated acts include, but are not limited to the following:

- **Alteration of University Documents:** Forgery of any signatures; submitting an altered transcript of grades to or from another institution or employer; putting one's name on another individual's work; or falsely altering a previously graded exam or assignment.

- **Cheating:** Cheating includes fraud, deceit, or dishonesty in an academic course or exercise in an attempt to meet academic requirements by gaining an unfair advantage and/or using or attempting to use unauthorized materials, information, or study aids on any academic course or exercise.

Examples of cheating include, but are not limited to using any electronic device to copy, transmit, or receive information during an exam; any form of contract cheating such as asking or paying someone to take a test, write a paper, or complete any assignment for you; obtaining a copy of an exam without instructor permission; and sharing copies of exams with students who have yet to take the exam.

- **Disturbance in the Classroom or Lab:** Disturbances in a traditional or online classroom or lab that serve to create an unfair academic advantage for oneself or a disadvantage for another member of the academic community.

Examples of disturbing a classroom or lab include, but are not limited to stealing or damaging lab equipment and/or experiments; pulling the fire alarm to avoid a course or exercise.

- **Facilitating Academic Misconduct:** When an individual helps or attempts to help another individual carry out an act of academic misconduct.

Examples of facilitating academic misconduct include, but are not limited to collusion; any form of contract cheating such as willingly providing or selling a paper, notes, handouts, and/or any other materials in an unapproved manner that provide an academic advantage to another student; agreeing to take a test, write a paper, or complete an assignment for someone else; or falsifying information or forging signatures on course documents.

- **False Representation, Fabrication or Alteration of Information:** The unauthorized falsification or invention of any information or citation in any academic course or exercise.

Examples of false representation, fabrication, or alteration of information include, but are not limited to furnishing false information about oneself or a writer and/or speaker; fabricating or altering information and presenting it as legitimate; providing false or misleading information to an instructor or any other University official.

- **Plagiarism:** Plagiarism is when one represents the organizational design, ideas, phrases, sentences or larger units of discourse from another writer and/or speaker without proper acknowledgement in an academic course or exercise. Plagiarism occurs when one fails to document all the sources of text and ideas that derive from someone else's work.

Examples of plagiarism include, but are not limited to, failure to enclose text copied directly from a source in quotation marks and to identify the source; failure to identify a

source of summarized or paraphrased material; failure to identify the source of an idea taken from someone else's work; cutting and pasting from electronic sources without citation; self-plagiarism of one's previous work in an unapproved manner; and failure to acknowledge sources from various formats or mediums, including web pages, television, films, artwork, digital or sound recordings, speeches, and traditional hard copy.

IV. Reporting Acts of Academic Misconduct

Individual Responsibility as a Member of the Chatham University Community

Any member of the Chatham University community who has witnessed an apparent act of academic misconduct (technical or substantiated), or has information that reasonably leads to the conclusion that such an act has occurred or has been attempted, has the responsibility to inform the Academic Integrity Officer or their designee as soon as possible at academicintegrity@chatham.edu to ensure adherence to the University's academic integrity policy and procedures.

Contacting the Academic Integrity Officer initiates notification of instructors, Chairs/Program Directors, and/or Deans to apparent acts of academic misconduct in order to comply with this policy and its procedures.

V. Consequences for Acts of Academic Misconduct

The Honor Code strives to educate students to promote personal growth and understanding of what it means to be a contributing member of the University community. While sanctions aim to be educational in nature, sanctions can also be punitive depending upon the circumstances of the act of academic misconduct. The determination of sanctions is based upon several factors, including the nature of the act of academic misconduct, the impact of the act of academic misconduct on the community, any previous acts of academic misconduct, and any mitigating or aggravating circumstances.

A. Disciplinary Status

It is expected that Respondents found responsible for an act of academic misconduct will be subjected to at least one of the following disciplinary statuses and may be subject to an accountability and support plan, which is designed to educate and encourage reflection on the student's decisions and provide assistance in gaining skills to avoid and prevent future academic misconduct. All student-athlete disciplinary statuses will be reported to the Athletics Department and athletes may be subject to additional process and sanctions.

Educational Warning: An unofficial written notice generally used for first-time, technical acts of academic misconduct that fall within the informal resolution process. It indicates that the academic misconduct violated the tenets of the Honor Code and warrants education and modification for the future. A student who is in this status may still complete an accountability and support plan, but this status will typically warrant a discussion and reflection on better decision-making as well as gaining skills to avoid and prevent future academic misconduct. Unlike other sanctions, an educational warning status will not appear in a student's conduct file, but it will be maintained in the Academic

Integrity Officer's academic misconduct records and may be taken into consideration if additional academic misconduct occurs.

Disciplinary Warning: An official written notice which conveys that the academic misconduct violated the tenets of the Honor Code and that future acts of academic misconduct may result in more severe disciplinary sanction. This sanction status will be reflected in the Student's Conduct File and could be reported per Section VII: Retention of Records.

Probation: An official written notice indicating that subsequent acts of academic misconduct will result in a review for suspension or dismissal from the University. The probation will be enacted for a specified duration admonishing a student that if the student is found responsible for engaging in academic misconduct during this time period more severe disciplinary sanctions will be imposed. Conditions of probation include, but are not limited to, loss of privileges and fines and fees. This status is used in the case of substantiated acts of academic misconduct and repeated acts of academic misconduct. This sanction status will be reflected in the Student's Conduct File and could be reported per Section VII: Retention of Records.

Suspension: An official written notice outlining the separation of the student from the University for a defined period of time, after which the student is eligible to return. The sanction prohibits attendance at any classes and participation in the University Study Abroad program and may restrict access to University grounds or buildings, as well as attendance at University sponsored social events or other functions. The student may not register or enroll until the stated period of suspension is completed and any requirements for the period of suspension or conditions to return to the University are fulfilled. This sanction status will be reflected in the Student's Conduct File and on the official transcript.

Dismissal: An official written notice outlining the permanent separation of the student from the University. This sanction status will be reflected in the Student's Conduct File and on the official transcript. This record will be retained permanently.

B. Student and Recognized Student Organization Accountability and Support Plan Options

Respondents may also be subject to an Accountability and Support Plan, which is designed to educate and encourage reflection on the student's decision-making process as well as gaining skills to avoid and prevent future academic misconduct. Accountability and Support plans can be created for individual students, recognized student organizations, athletic teams, and/or groups of students.

An Accountability and Support plan for a technical act of academic misconduct may include, but is not limited to, requiring the student to resubmit the assignment or take a new exam; failing the student on the assignment or exam; lowering the student's grade in the course; requiring an assigned paper or research project related to ethics or academic integrity; scheduling a meeting with the Academic Integrity Officer; requiring the student to participate in a workshop, seminar, or tutorial on ethics, academic integrity, or specific writing mechanics; or the appointment of a writing tutor to assist with writing skills.

An Accountability and Support Plan for a substantiated act of academic misconduct may include, but is not limited to requiring the student to participate in a workshop or seminar on ethics or academic integrity; requiring an assigned paper or research project related to ethics or academic integrity; scheduling a meeting with the Academic Integrity Officer; participation in a credit bearing course on ethics or academic integrity; failure of the course; removal of graduate fellowship or assistantship support; removal of scholarships or honors; probation; suspension for one or more semesters/terms; or dismissal from the University in addition to any course-based or institutional sanctions recommended by the instructor, Academic Integrity Board and Dean of the appropriate school.

A student who chooses to withdraw from the University rather than participate in the academic integrity process will be classified as having been withdrawn for reasons of academic misconduct and a hold will be placed on the student's account. A student who withdraws under these circumstances is not permitted to reenroll or participate in any class or program until the pending matter is resolved. A student cannot avoid consequences for violating the University's Academic Integrity Policy by withdrawing from the course in which the violation occurred. The University reserves the right to change any Withdrawal (W) grades to a letter grade based on the outcome of the academic integrity process.

If a student does not complete the sanctions and/or accountability and support plan associated with their act of academic misconduct by the determined deadline, the student will be placed on probation and a hold may be placed on the student's account.

Extenuating circumstances which prevent a student from completing sanctions and/or accountability and support plan by the determined deadline must be documented and will be considered on a case-by-case basis.

VI. Appeals to Decisions on Acts of Academic Misconduct

A student, students, recognized student organization or athletic team that has gone through the Formal Resolution process, has the right to file a written appeal with the Vice President for Academic Affairs (VPAA) within five (5) business days of receiving the Dean's decision for the following reasons only: 1.) a procedural error unfairly and materially affected the outcome of the case 2.) evidence has been discovered that was not reasonably available at the time of the hearing or 3.) there was a clear abuse of discretion on the part of the Honor Code Committee.

The appeal must identify and cite the issues or findings the student is challenging as well as documentation supporting their position.

The VPAA will contact the student who makes an appeal regarding the next steps in the review of the appeal.

The VPAA's decision will be final and communicated to the student in writing within ten (10) business days.

Further instructions on how to write an appeal will be provided to a student with the Dean's decision. Questions about the appeals process should be directed to the Academic Integrity Officer.

VII. Retention of Records

Chatham University retains outcomes of the Student Honor Code and Academic Integrity proceedings in the student record and in the student management system. Records of the proceedings are maintained by the Dean of Students and/or Academic Integrity Officer.

Records of student conduct and academic integrity proceedings are confidential and are not released to any external individual, agency, or organization except without the prior written consent of the current/former student or as otherwise required or authorized by law, court order or University policy.

Records pertaining to student conduct and academic integrity proceedings generally do not result in a notation on the student transcript unless the student is suspended or dismissed as a result of these proceedings. Educational Warning statuses are not included in the student's conduct file.

All other statuses outlined in Consequences for Academic Misconduct will become a part of the student conduct file and will be retained for either the period of time required under the federal Clery Act (which in most cases is six to seven years after the date the incident was reported to the University), or seven years after final separation of the student from the university, whichever is longer.

For purposes of determining final separation from the University, a student must be separated for seven continuous years. If a student reenrolls in any student program within seven years, the calculation of the final separation date will reset. If a student withdraws from the University prior to final adjudication of a student conduct or academic integrity matter or fails to fulfill all obligations to the University, the records of the proceedings will be retained indefinitely.

VIII. Amendment/Review of Policy

The Chatham University Honor Code – Policy on Academic Integrity will be reviewed by the Academic Integrity Officer, the Committee on Academic Policy, the Honor Code Committee and the designated body one year after implementation and then every three years thereafter. In addition, the Honor Code may be amended at any time due to a change in local, county, state, or government laws and/or policies.

IX. Forms

- **Academic Misconduct Form** can be found on myChatham.edu in Documents & Forms under Academic Integrity.

X. Contacts

Questions regarding the interpretation of this policy should be directed to:

Academic Integrity Officer
Chatham University
One Woodland Rd.
Pittsburgh, PA 15232
academicintegrity@chatham.edu

The Vice President for Academic Affairs is the University official responsible for the administration and interpretation of this policy.

PROCEDURES FOR ADDRESSING ACTS OF ACADEMIC MISCONDUCT UNDER THE HONOR CODE: POLICY ON ACADEMIC INTEGRITY

Chatham utilizes the following procedures to adjudicate allegations that a student, students, recognized student organization, or athletic team violated the Honor Code Policy on Academic Integrity

I. Individual Responsibility as a Member of the Chatham University Community

Refer to Section IV of the Policy on Academic Integrity.

II. Reporting Acts of Academic Misconduct

a. How to Report

Allegations that a Chatham student, students, recognized student organization or athletic team engaged in academic misconduct may be brought forward by contacting the Academic Integrity Officer or their designee at academicintegrity@chatham.edu.

Faculty and staff may file an Act of Academic Misconduct Form to formally report acts of academic misconduct after notifying and communicating with the Academic Integrity Officer or their designee and/or their Chair or Program Director.

The Academic Integrity Officer also has access to other Chatham reports and internal communications (*e.g.*, Incident Reports, Campus Security Authority (CSA) reports, reports from the Office of Campus Police) which, if they refer to conduct or action that constitute academic misconduct under the Honor Code, will be considered a report or reporting for purposes of the Academic Integrity Policy. In addition, the Academic Integrity Officer and/or Dean of Students may be notified of incidents from off-campus agencies (*i.e.* police reports, reports from local universities) and can use these reports to pursue action if the conduct described constitutes academic misconduct.

III. Identifying the Act of Academic Misconduct

1. The instructor identifies a technical or substantiated act of academic misconduct.
2. The instructor notifies and communicates with the Academic Integrity Officer or their designee and/or their Chair or Program Director and indicates that a technical or substantiated act of academic misconduct has been identified.
3. The Academic Integrity Officer consults with the instructor about the Policy and Procedures on Academic Integrity to begin the process to address the act of academic misconduct with a student and indicates whether or not this is the student's first offense.

If it is not the student's first offense of a technical or substantiated act of academic misconduct, the Academic Integrity Officer in consultation with the Dean of the appropriate school will determine how to proceed based on the procedures outlined in this policy. In addition, programs, particularly those that are professionally accredited, may have approved policies in place that students are also bound by and should reference in addition to those outlined here.

Previous acts of academic misconduct committed by a student in the same course, but not discovered and/or reported until the most recent act is identified, may be entered into the Academic Misconduct Form. However, these retroactive notifications will not impact the classification of the offense and/or the appropriate judicial response as outlined in this policy.

Technical and/or substantiated acts of academic misconduct identified after a grade has been submitted for a course or at any other point while the student is still actively enrolled should be reported and proceed through the appropriate disciplinary process. However, in accordance with University policy regarding the changing of grades, acts of academic misconduct reported and adjudicated for a course one year after a grade has been submitted will not result in a grade change, but may result in appropriate sanctions being given to the student.

In those instances where an act of academic misconduct occurs at the end of an academic semester/term before the appropriate disciplinary process can take place, a grade of Incomplete will be given to a student for the course until the case is reviewed, sanctions, if appropriate, are given and completed, and any potential appeals are made which could further determine the student's final grade.

A student subject to an academic action which requires the student to withdraw from the University before the appropriate disciplinary process has occurred will be notified that academic integrity proceedings must take place. The student will receive reasonable accommodations in order to participate in the process. If a student chooses not to respond to these notifications, the appropriate disciplinary process will proceed without the student present. The student will be notified of the outcome of the proceedings and is required to complete any sanctions related to the act of academic misconduct in addition to those requirements associated with the student's academic action in order to return to the University.

Students who commit an act of academic misconduct in their final academic semester/term and intend to graduate will not be permitted to do so until the case has proceeded through the appropriate disciplinary process.

IV. What Happens After Academic Misconduct is Reported?

a. Preliminary Review

When an allegation of academic misconduct has been brought to the attention of and/or reported to the Academic Integrity Officer or their designee, a preliminary review consisting of appropriate fact-finding (including, but not limited to, whether a student had previous cases involving academic misconduct, conducting interviews and gathering evidence) to determine, at the

Academic Integrity Officer's discretion, which of two procedural options is appropriate. The Academic Integrity Officer presents the case and procedural approach for review by the Dean of the appropriate school in which the student is enrolled.

b. Multiple Acts of Academic Misconduct

If the student has committed two or more technical acts of academic misconduct, it is up to the Academic Integrity Officer in consultation with the Dean of the appropriate School in which the student is enrolled to determine whether or not to pursue the Formal Resolution process. If the additional act is not considered substantiated, the student may be placed on probation and/or additional sanctions will be given.

If the student has committed a second substantiated act of academic misconduct, the case will go through the Formal Resolution process, but in addition to the review and recommendation of any course-based and institutional sanctions, the Honor Code Committee will also make recommendations on whether the student should be placed on probation, suspension or dismissed for acts of academic misconduct.

V. Description of the Procedural Options for Resolving Allegations of Academic Misconduct

a. Types of procedural options for resolving an allegation of Academic misconduct:

i. Informal Resolution:

Scope:

Informal Resolution is typically reserved (a) for matters where a student acknowledges responsibility for committing an act of academic misconduct, (b) technical acts of academic misconduct, (c) matters involving recognized student organizations or athletic teams; and (d) academic misconduct that would not result in separation of a student from Chatham (such as suspension or dismissal).

Process:

Review and decision by the Dean of the appropriate school in which the student is enrolled with the accountability plan and/or sanctions managed by the Academic Integrity Officer or their designee:

Pursuing the informal resolution is at the discretion of the Academic Integrity Officer and the Dean of the appropriate school in which the student is enrolled; either of these individuals may elect to refer the matter immediately to a Formal Resolution. Instructors who report academic misconduct may request Formal Resolution which will be considered and reviewed by the Academic Integrity Officer and the Dean of the appropriate school in which the student is enrolled. A student, students, recognized student organization or athletic team who have been offered Informal Resolution may at any time in the process request that the matter be referred to the Formal Resolution process where an Academic Integrity Hearing will be held. As part of the Informal Resolution process, the student, students, recognized student organization or athletic team

must take responsibility for their actions. If they are unwilling to do so, then the matter would be referred to a Formal Resolution.

A student, students, recognized student organization or athletic team who have participated in the informal process have no grounds for appeal.

ii. Formal Resolution:

Scope:

Formal Resolution is typically reserved for students with multiple academic misconduct violations, repeated offenses, or allegations that may result in a University initiated separation of a student from Chatham (*i.e.*, suspension or dismissal). Matters that could initiate separation from the university will automatically be referred to the Honor Code Committee through the Formal Resolution process. At their discretion, the Academic Integrity Officer and/or Dean of the appropriate school in which the student is enrolled may refer other academic misconduct matters to the Honor Code Committee.

Academic Integrity Hearing:

Formal Resolutions are conducted before a three-member Academic Integrity Board consisting of one each of the following: student, faculty and administrator who are members of the Honor Code Committee and where the administrator is an employee of the University. Academic Integrity Boards are reserved for the most serious acts of academic misconduct that may result in a separation from the University.

University adjudication (Informal Resolution or Formal Resolution) is educational in nature and does not preclude or limit a student's access to the state and federal judicial systems when such systems may provide a cause of action for the same conduct alleged in Academic Integrity Hearings.

Academic Integrity Hearings are not courts of law and are not bound by the formal rules of evidence and certain rights accorded to parties in civil or criminal actions.

Attorneys and other associates of the student or of the university are not permitted to attend or participate in this Informal Resolution or Formal Resolution process.

When an Academic Integrity Hearing is convened, the person making the Complaint, usually the instructor, will be the Complainant during any Academic Integrity Hearing, and the person(s) alleged to have engaged in the act(s) of academic misconduct shall be the Respondent(s).

b. *Rights of the Parties*

Complainants and Respondents are afforded the following rights in Academic Integrity Hearings:

i. Respondent Rights

- To be informed in writing of the charge(s) and alleged act(s) of academic misconduct.
- To not be presumed responsible of any alleged act(s) of academic misconduct unless so found through the appropriate student conduct proceeding.
- To refrain from providing information that is self-incriminating.
- To remain silent. Silence is not construed as culpability.
- To have an Advisor (see Definition) during an Academic Integrity Hearing.
- To present witnesses at the hearing (although the administrator of the Academic Integrity Board may elect not to allow witnesses whose testimony would be duplicative or repetitive of other testimony). Witnesses are not allowed to testify to character of either the Complainant or the Respondent. Witnesses may only testify about what they directly observed or heard about the incident(s) from the Complainant or the Respondent.
- To request reasonable accommodations to participate in these proceedings through the support of The Office of Academic and Accessibility Resources.
- To have a reasonable length of time to prepare a response to any charges. Reasonable length applies to formal resolution and students will be given a minimum of 3 business days from the time of notification to prepare for the Academic Integrity Hearing.
- To be informed of the evidence upon which a charge is based and afforded an opportunity to offer a response.
- To be given an opportunity to articulate relevant concerns and issues, express opinions, and offer evidence before an Academic Integrity Board.
- To prepare and submit a written statement in matters that may result in separation from Chatham.
- To be afforded privacy by Chatham.
- To have their responsibility determined by the Preponderance of the Evidence (*i.e.*, “more likely than not”) standard.
- To request that a member of the Academic Integrity Board be disqualified on the grounds of personal bias.
- To be free from harassment, intimidation or retaliation for being a party to an Academic Integrity Board. Retaliation is expressly prohibited in the Honor Code and allegations of Retaliation will be investigated and prosecuted when appropriate under the Honor Code.
- To appeal a decision based on certain grounds enumerated below (see Appeals).

ii. Complainant Rights

- To be informed in writing of the charge(s) and alleged act(s) of academic misconduct.
- To have an Advisor (see Definition) during an Academic Integrity Hearing.
- To present witnesses at the hearing (the administrator of the Academic Integrity Board may elect not to allow witnesses whose testimony would be duplicative or repetitive of other testimony). Witnesses are not allowed to testify to character of either the Complainant or the Respondent. Witnesses may only testify about what they directly observed or heard about the

incident(s) from the Complainant or the Respondent.

- To request reasonable accommodations to participate in these proceedings. through the support of The Office of Academic and Accessibility Resources.
- To have a reasonable length of time to prepare for a proceeding.
- To be given an opportunity to articulate relevant concerns and issues, express opinions, and offer evidence before Academic Integrity Board.
- To be afforded privacy by Chatham.
- To request that a member of the Academic Integrity Board be disqualified on the grounds of personal bias.
- To be free from harassment, intimidation or retaliation for being a party to an Academic Integrity Board. Retaliation is expressly prohibited in the Honor Code and allegations of Retaliation will be investigated and prosecuted when appropriate under the Honor Code.
- To appeal a decision on certain grounds enumerated below (see Appeals).

VI. What Happens Prior to an Academic Integrity Hearing?

a. Notifications and Communications

The Academic Integrity Officer, shall notify in writing (email is acceptable) the Respondent, copying the Complainant (if applicable) about scheduling an Academic Integrity Hearing. The letter shall include the Act of Academic Misconduct Form, which when applicable, should include, but is not limited to a description and supporting documentation of the act of academic misconduct, the course exercise instructions and the course syllabus.

The letter shall direct the Respondent and Complainant to the “Rights of the Parties” section in these procedures on Academic Integrity, provide assistance with identifying an Advisor, if the Respondent wishes to select one, and begin coordination of the date, time, and place (a virtual hearing through videoconferencing is permitted) of the Academic Integrity Hearing.

Ordinarily, the hearing should be held within three (3) to ten (10) business days of the notification. Additional time may be requested to the Academic Integrity Officer due to academic requirements and deadlines.

b. Opportunity for Respondent to Object to Formal Resolution Academic Integrity Board Members

When a date, time and location for an Academic Integrity Hearing has been determined, the Academic Integrity Officer will appoint an Academic Integrity Board for a Respondent’s case. The Academic Integrity Officer will notify the Respondent in writing of the date, time and location of the Academic Integrity Hearing and the identity of the Academic Integrity Board members.

The Respondent shall have two (2) Business Days from such notification to object to any member of the Academic Integrity Board on the basis that the person(s) would be unable to render a fair and objective decision because of personal bias.

The fact that the Respondent knows or is acquainted with an Academic Integrity Board member is not enough, alone, to establish bias. The Respondent must present evidence of specific prior

interaction(s), communications, or relationship with an Academic Integrity Board member that show that the individual would be biased against the Respondent. Similarly, while the Academic Integrity Officer will not appoint a faculty member to the Academic Integrity Board who teaches a class in which the Respondent is currently enrolled, the fact that the Respondent took a class from a faculty member on the Academic Integrity Board in the past is not enough alone to preclude that faculty member from serving on the Respondent's Academic Integrity Board – barring evidence of personal bias of the kind described above.

If the Respondent has not objected to the slate of Academic Integrity Board members within the original two (2) business days, the Academic Integrity Officer will hand the matter over to the Academic Integrity Board to arrange and conduct hearing.

The Academic Integrity Officer shall provide the Academic Integrity Board with copies of the Act of Academic Misconduct Form, which when applicable, should include but is not limited to a description and supporting documentation of the act of academic misconduct, the course exercise instructions and the course syllabus.

c. Witnesses and Advisor

It is the Complainant's and Respondent's responsibility (i.e., not the responsibility of the Academic Integrity Officer or the Academic Integrity Board) to notify any witness, witnesses, or Advisor of the Respondent about the date, time and location of the hearing.

At least two (2) business days before an Academic Integrity Hearing, it is the responsibility of the Respondent and Complainant to notify the Academic Integrity Officer of the names of their Advisor and any witness(es) they plan to present at the hearing, and a brief description of the content of each witness's testimony.

Prior to the Academic Integrity Hearing, the members of the Academic Integrity Board shall meet, either in person or virtually, to review the case and the structure of the hearing.

d. Recording and Note-Keeping During Academic Integrity Hearings

The administrator of the Academic Integrity Board shall designate someone on the Board to take handwritten notes during the Academic Integrity hearings.

Academic Integrity Hearings will also be audio and/or video recorded. The administrator of the Academic Integrity Board shall operate the audio and/or video recording device. Please see Section 4 for more information about audio and/or video recordings.

e. Rescheduling an Academic Integrity Hearing at a Party's Request

The Complainant and the Respondent are not required to attend the hearing, but the hearing will occur as scheduled, and the right to question written information, witnesses and the complainants will be forfeited if the Complainant or Respondent does not attend. The Academic Integrity Officer can serve as a representative for the Complainant if requested.

Should a Complainant or Respondent need to reschedule an Academic Integrity Hearing because

either they, a witness, or their Advisor cannot attend the hearing, the Complainant or Respondent may request to the Academic Integrity Officer as appropriate, that the hearing be rescheduled. Such request must be made at least 24 hours before the scheduled academic integrity hearing.

Requests made less than 24 hours in advance will be reviewed by the Academic Integrity Officer to determine if extenuating circumstances warrant an exception. Only one request for rescheduling will be granted to a Complainant or Respondent.

f. *Postponing an Academic Integrity Hearing*

If the Academic Integrity Officer is not able to convene an Academic Integrity Board because of calendar or other considerations (*e.g.*, over Summer break when students, faculty, and staff may not be present and available), the Academic Integrity Officer may postpone the hearing until it is possible to convene the Academic Integrity Board. If the Academic Integrity Officer determines that the hearing cannot wait, every effort will be made to constitute an Academic Integrity Board from available Honor Code Committee members who are able to serve.

3. What Happens During an Academic Integrity Hearing

a. Order of Proceedings

Academic Integrity Hearings will be held in a secure and private (*i.e.*, closed door) room on Chatham's campus. Hearings and witness statements may also be conducted virtually using a secure platform such as Microsoft Teams. While the administrator of the Academic Integrity Board may have some discretion to modify the proceedings to suit the nature of a case, ordinarily the hearing will begin with everyone (Complainant, Respondent, witness(es), Advisor, and Academic Integrity Officer) in the hearing room.

b. *Introduction*

- i. The Academic Integrity Board administrator facilitates introductions of all persons present where each person explains their roles.
- ii. The Academic Integrity Board administrator explains the purpose of the hearing and describes the order of events of the hearing.
- iii. The Academic Integrity Board administrator reminds the Respondent, Complainant (if applicable), Advisor(s) and any witnesses that:
 - Complete candor and honesty are required in the hearing. Perjury and intentional evasiveness are themselves grounds for disciplinary action.
 - What happens in the hearing should remain confidential.
 - Respondents or Complainants who harass, intimidate or attempt to influence the testimony of any parties involved in a Student Conduct hearing, or the members of the Academic Integrity Board will be subject to disciplinary action.
 - The hearing is not a legal proceeding.
- iv. The Academic Integrity Board administrator states that the proceedings, but not the deliberations, will be audio and/or visually recorded for use if any party chooses to appeal the determination. No one will have access to the recording after the hearing except the Complainant or Respondent if

preparing an appeal, the Academic Integrity Officer or the person hearing such an appeal. Because we are creating an audio and/or visual record we will ask anyone speaking or testifying during the proceeding to identify themselves before speaking or testifying.

- v. The Academic Integrity Board administrator states that only the Complainant and the Respondent will remain in the hearing room throughout the hearing. Witnesses will remain outside the hearing room and will be called in when it is their time to testify.
- vi. At this point, the Academic Integrity Board administrator dismisses any witnesses to a waiting area outside the closed doors of the hearing room. The Complainant and Respondent and any Advisor(s) remain in the room.

c. Statement of Alleged Infraction(s)

The Academic Integrity Board administrator reads the list of alleged specific acts of academic misconduct and summarizes the information presented in the Act of Academic Misconduct Form and hearing packet.

d. Response from Respondent

The Academic Integrity Board administrator invites the Respondent to respond to the allegation(s) and to the information presented in the Act of Academic Misconduct form and hearing packet. The response may be:

- i. agreement with the allegation(s) and acknowledge responsibility,
- ii. disagreement with the allegation(s) and not acknowledge responsibility; and/or
- iii. a statement (explanation, elaboration or rebuttal).

If the Respondent agrees with and acknowledges responsibility for the allegations, the Academic Integrity Board administrator may elect not to proceed further and instead to begin discussions on sanctions. Note, the Respondent will be given an opportunity to agree with the allegations and acknowledge responsibility in advance. If doing so, the Academic Integrity Board may determine to move to discussion of sanctions at the opening of the board.

e. Opportunity for Testimony and Questions

- i. The Respondent and the Complainant have the right to testify orally, in writing, or both.
- ii. The Academic Integrity Board and then the Respondent are provided opportunity to question the Complainant.
- iii. The Academic Integrity Board and then the Complainant are provided opportunity to question the Respondent.
- iv. The Academic Integrity Board, then the Complainant, then the Respondent are provided an opportunity to question the Complainant's and the Respondent's witnesses, one at a time.
 - a. The precise order of witnesses will be determined by the Academic Integrity Officer or their designee and/or the Academic Integrity Board administrator in consultation with the

Complainant and Respondent. Insofar as possible, the order of witnesses will be determined prior to the hearing; if circumstances require it, the order may be altered as the Academic Integrity Board administrator deems necessary and appropriate during the hearing.

f. Concluding Questions and/or Statements

When the Academic Integrity Board administrator determines that all relevant evidence and/or testimony has been heard, the Chair/AHO invites concluding questions and/or statements. The Academic Integrity Board administrator determines who will provide a closing statement first (Complainant or Respondent).

g. Adjournment of the Hearing

The Academic Integrity Board administrator thanks and dismisses anyone who is not a member of the Academic Integrity Board and the audio and visual recording.

4. What Happens After an Academic Integrity Hearing?

a. Deliberations by the Academic Integrity Board

The Academic Integrity Board considers the evidence and testimony from the hearing and makes a determination of either responsibility or non-responsibility for each allegation. In making a determination of responsibility, the Academic Integrity Board uses the Preponderance of the Evidence standard (*i.e.*, “more likely than not”) and the determination of sanctions must be by majority vote. If the Academic Integrity Board finding is “responsible” for any of the academic misconduct allegations, the past academic integrity history of the Respondent(s), provided by the Academic Integrity Officer, will be considered in determining the Academic Integrity Boards recommendations regarding appropriate sanction(s).

b. Notification of Outcome

The administrator transmits to the Academic Integrity Officer and the Dean of the school in which the student is enrolled a written report of the Academic Integrity Hearing proceedings and recommendations.

c. Academic Integrity Hearing Notes and Recording

The administrator of the Academic Integrity Board shall submit the audio recording and any handwritten notes to the Academic Integrity Officer after completion of the Academic Integrity hearing.

All contents of the hearing packet, documents presented at the hearing and notes taken during hearing should be collected and kept by the Academic Integrity Officer. In the case of an appeal, either party may access a copy of the packet and/or notes taken during the hearing through the Academic Integrity Officer. No Chatham community member (faculty, staff, or student), but the Academic Integrity Officer, the person filing and the person hearing an appeal may have access to the audio and/or video recording.

The Academic Integrity Officer shall retain the audio and/or video recording and any written notes of the hearing. The recording and the written account are the property of the University and will be used only by the person hearing any appeal. Once the designated time for the appeal process has passed, the Academic Integrity Officer shall destroy the audio and/or video recording and notes.

Other materials associated with the case will abide by the Retention of Records section of this policy.

5. **Appeals to Decisions on Acts of Academic Misconduct**

Refer to Section VI on the Policy on Academic Integrity.

Satisfactory Academic Progress - Undergraduate

All students are expected to maintain at least a 2.0 cumulative grade point average (GPA) unless noted otherwise by a specific program. Full time students are expected to accumulate course credits, with a minimum course load of 12 credits per long semester (fall, spring, summer); 15 credits per semester is the rate consistent with achieving 120 credits in 8 semesters. A student's progress is reviewed at the close of each term/semester. At that time, the appropriate academic dean's office reviews the progress of all students who have not met University standards. Students may be granted a probationary period when they fall below this expectation. Students may receive an academic warning, an academic probation, an academic suspension, or dismissal from the University depending on the review of the overall academic record.

The majority of undergraduate academic actions and separations are recorded on the student's transcript, with the exception of academic warning, and these actions may endanger the continuation of financial aid.

Satisfactory Academic Progress - Graduate

All graduate students are required to maintain a minimum cumulative grade point average (GPA) of 3.0 during their enrollment. At the time of completion of graduate degree requirements, students must have earned a minimum of a cumulative 3.0 grade point average (GPA) unless noted otherwise by a specific graduate program. Satisfactory progress toward a degree is monitored each term/semester by this same criterion. Unless otherwise specified by the graduate program, the minimum full-time academic load during any semester is nine credit hours per semester. In the PsyD program, full time academic load is six credits.

Students determined to be not in good academic standing are subject to academic probation, academic suspension, or academic dismissal depending on the review of the overall academic record. Additional program specific academic standing policies for students in the School of Health Sciences can be found in the specific program handbook.

When a student earns a grade lower than B-, the course must be repeated if the course is required as part of a degree program. In extenuating circumstances, a department chair or program director, with the dean's approval, may substitute another course of similar content. Additionally, no course may be repeated more than twice. If the repeated grade earned is less than B-, the student will be dismissed.

The majority of graduate academic actions and separations are recorded on the student's transcript, with the exception of academic warning, and these actions may endanger the continuation of financial aid.

RN-BSN Academic Standing and Progression Policy

All RN-BSN students are required to complete a minimum total of 120 credit hours in college level courses. To progress toward the BSN degree students must earn a minimum grade of C- (70%) or better in a graded course, or a grade of pass in pass/fail courses, in all courses and maintain a minimum GPA of 2.0 or higher. Failure to meet these standards could result in the following academic actions:

1. A student will need to retake any required core RN-BSN course(s) with an earned grade below C- (70%) in a graded course or a grade of fail in pass/fail courses and earn a passing grade. A second earned grade below C- (70%) in a graded course or fail in pass/fail courses in ANY required core RN-BSN course in a subsequent term or semester will be cause for dismissal from the program.
2. A student who earns a GPA below 2.0 in any term, unless they are only enrolled in a pass/fail course, will be placed on Academic Warning. A student will also be placed on Academic Warning if they withdraw from the same required core RN-BSN course two times. The student must earn a GPA above 2.0 in the subsequent term, or successfully complete the course from which the student withdrew, in order to return to good standing.
3. A student who earns a GPA below 2.0 in two consecutive terms, or has a cumulative GPA below 2.0, will be placed on Academic Probation. A student placed on Academic Probation is strongly advised to meet with their Nursing Academic Advisor and the Office of Academic & Accessibility Resources (OAAR) to design a plan that will enable the student to return to good academic standing. The student must earn both a term and semester GPA of 2.0 or higher in order to have the probationary status removed.
4. A student who earns a GPA below 2.0 in three terms, consecutive or not, or has a cumulative GPA below 2.0, will be placed on continued Academic Probation. A student on continued Academic Probation is required to create and complete a remediation plan with their Nursing Academic Advisor and collaborate with the Office of Academic & Accessibility Resources (OAAR) for the next enrolled session. The student must earn both a term and semester GPA of 2.0 or higher in order to return to good academic standing. Students unable to meet the requirements of continued Academic Probation are subject to Academic Suspension and Dismissal as described in the Chatham University Course Catalog.

Academic Warning

Academic Warning is a University-initiated intervention which alerts a student of concerns with their academic progression toward graduation.

Undergraduate students (with the exception of First Year students*) who earn a semester GPA below 2.0 will be placed on Academic Warning.

Academic Warning status for undergraduate students is not subject to appeal.

Academic Probation

Academic probation is a University-initiated intervention which requires a student to take specific actions which are geared toward improving the student's academic progress while enrolled at Chatham. Actions associated with academic probation, include, but are not limited to restrictions on the number of credits a student can take during the term/semester, regular ongoing meetings with staff in the Office of Academic and Accessibility Resources, ineligibility to hold leadership roles within a student organization, and ineligibility to participate in a team sport.

All undergraduate students who meet any of the following criteria will be placed on Academic Probation:

- A cumulative GPA below 2.0 for the first time OR
- Two consecutive semesters with a semester GPA below 2.0 OR
- Three or more semesters with a GPA semester below 2.0 even if their cumulative GPA is above 2.0.
- *First Year students who earn a GPA below 2.0 in their first semester.

Academic Probation status for undergraduate students is not subject to appeal, but certain conditions required of the status may be appealed.

Academic Suspension

Academic suspension is a University-initiated intervention which requires a student to separate from Chatham for a specified period because of poor academic performance. Academic suspension is administered with the best interest of the student's future academic success in mind. If a student does not fulfill the conditions of the suspension within the timeframe outlined by the academic Dean of their school, then the student will be dismissed. Students who wish to return after the designated timeframe has passed should contact the academic Dean of their school and may be referred to the Office of Admissions for reinstatement.

In all cases of academic suspension, the student, the academic advisor, the Office of Academic Affairs, the Office of Student Affairs, all appropriate staff members and parents or guardians, when deemed necessary, will be notified of this action.

Undergraduate students who meet any of the following criteria are subject to suspension

- A semester GPA of 1.0 or lower OR
- A cumulative GPA below 2.0 for two semesters OR
- A cumulative GPA below 2.0 after at least one previous semester of academic probation.
- More than one NS grade, or combination of multiple NS/I/F grades, while on academic probation.

If a student receives a final course grade of I (Incomplete), and the student's GPA without including that incomplete course meets one of the criteria above, the student will be placed on academic suspension. If suspended, the student will still be required to complete the work for the incomplete course within the previously set time frame. (See section on Incomplete Grades for additional information.)

In the event of subsequent academic performance issues, a student will not be granted a second suspension; the student will be dismissed from the university.

Academic Suspension status for undergraduate students can be appealed by the students. Students who are academically suspended will be provided with information to make an appeal. Students who successfully appeal their Academic Suspension, are allowed to return and will be placed on Academic Probation.

Academic Dismissal

Academic Dismissal is a University-initiated action which is a permanent separation of the student from the University.

Academic Dismissal status for undergraduate students is subject to appeal. Students who receive this status will be provided with information to make an appeal.

Academic Probation

All graduate students at Chatham University are required to earn a minimum grade point average (GPA) of 3.0 to be eligible for degree conferral. Grades below B- will not result in graduate credit applicable for degree completion for degree-seeking graduate students.

Graduate students with a semester GPA below 3.0 will be placed on Academic Probation.

A graduate student on Academic Probation unable to earn a semester GPA above 3.0 during the following semester is subject to academic suspension or dismissal.

Academic probation status for graduate students is not subject to appeal, nor are the conditions of the status.

Academic Suspension or Dismissal - Graduate Students

Graduate students who are on academic probation and fail to make a 3.0 grade point average (GPA) or the equivalent for the next semester or fail to have a 3.0 cumulative GPA after two semesters will be subject to suspension or dismissal from the program.

Students who have been suspended may have an opportunity to return to the school; the criteria to re-enter will be outlined in the suspension letter from the dean.

Academic Suspension or Dismissal status for graduate students is subject to appeal.

Academic Appeals

Some academic action statuses may be appealed, or the conditions of the academic action may be appealed. Refer to the academic action status for more information on whether the status and/or the conditions of the status can be appealed.

Students may appeal the eligible academic action status and/or the conditions of the status by contacting the academic Dean of the student's school.

Suspensions or Dismissals may be appealed to the appropriate academic dean within fourteen days of the date that the suspension or dismissal notification was sent. Appeals made to the Dean must be in writing, must include written documentation supporting the appeal, and must be submitted within 14 calendar days. The Dean will investigate the case, hearing both the student and the faculty member and will render a decision within 30 calendar days of receiving the petition. After the Dean's decision has been rendered, the appellant has the right to carry the appeal to the Vice President of Academic Affairs, in writing and must include supporting documentation to support the appeal. Such an appeal must be provided in writing to the Vice President of Academic Affairs' office no later than five (5) calendar days after the student has received the decision from the Dean. The Vice President of Academic Affairs will investigate the case, hearing both the student and the faculty member and will render a decision within 30 calendar days of receiving the petition. The Vice President of Academic Affairs will inform the student and the faculty member of the decision in writing. The Vice President of Academic Affairs' decision is final.

Individual graduate programs may have additional guidelines regarding suspension and dismissal that are published in the program's student handbook.

Withdrawal from the University

Withdrawal from the University is a student-initiated action that an active enrolled student takes to formally separate from Chatham. As a result of the Withdrawal from the University, the student will no longer be considered an active enrolled student at Chatham.

A student considering a Withdrawal from the University is encouraged to consult with their academic advisor, the Office of Financial Aid, and the Office of Student Accounts prior to completing and submitting the Withdrawal from the University form so the student understands the unique impact this action will present to the student.

A student who wishes to execute a Withdrawal from the University must complete and submit the Withdrawal from the University form to the University Registrar (which includes the signatures of their academic advisor, Chair or Program Director, and academic Dean of their school.)

If a student withdraws from the University prior to the semester's start or during the add/drop period, their scheduled courses will be cancelled. If a student withdraws during the withdrawal period, (W) grades will be awarded for their entire schedule of registered courses. The withdrawal actions will be recorded on the student's transcript.

The last day to withdraw is posted on the Academic Calendar. Refunds will be made in accordance with University and federal government refund policies.

Withdrawing from the University for military activation requires deployment proof prior to being deployed. Proof may be faxed, mailed, or hand-carried, and it may take the form of general orders cut by the company commander. When a student is activated during the semester, Financial Aid, Student Accounts, and University Registrar policies will take effect, and questions should be directed to these offices. When a student is activated near the end of the semester, the student and their faculty members may determine that incomplete (I) grades are more appropriate. If incomplete grades are recorded, tuition will not be waived.

When a student does not complete the Withdrawal from the University form, that student will remain in an active not attending status for one academic year. Following this period, if the student does not register for courses for an upcoming semester, the University will administratively withdraw the student, and the withdrawal from the University action will be recorded on the student's transcript.

Students who return to the University after withdrawal of a year or more must contact the Office of Admissions to begin the process of reinstatement. Additionally, graduate students must be reaccepted by their program prior to returning.

IDP Leave of Absence Policy

Integrated Degree Program (IDP) students who choose to take a temporary leave of absence from their academic degree programs must receive approval from their Advisor and Graduate Program Director. If approved, they will be permitted to take up to a one calendar year leave from the date of last enrollment in their Program(s). Students must follow protocol for Withdrawal from the University. Upon return, the student may be required to meet the requirements under the catalog in effect at the time of readmission.

Spring 2020 Grade Policies Enacted in Response to COVID-19

Undergraduate Grading

For the 20SP2 and 20SP3 semesters, Chatham University undergraduate students were given the opportunity to change assigned letter grades of C- or above to P (pass).

Transfer Credit

Normally, for incoming transfer students, only courses with grades of C or above are accepted for credit. However, because of the variation that exists among institutions, Chatham will accept grades of C- or better, or P or S grades that are defined as C- or better, for classes taken in 20SP only at other institutions. If the policy at the student's former institution allows D grades to count toward P (Pass) designations, the student has the opportunity to provide supplemental information (e.g. confirming email from the appropriate faculty member) to show that grade was in Chatham accepted range. Courses with "F," "No credit," "NP," "US," "Z" grades, or similar equivalents are not transferable.

Academic Grade Appeals

A challenge to a grade received in a course, thesis, capstone, or other graduation requirement will be considered only when the student alleges that the grade received reflects other than appropriate academic criteria; that is, achievement and proficiency in the subject matter as stated in the course syllabus.

The statute of limitation requires all grade changes to be completed within one year from date of issue. A student wishing to challenge a grade received in a course must first notify the instructor in writing in an effort to resolve the grievance. If the grievance is not settled, the student must then appeal the matter in writing to the Department Chair or Program Director.

If the issue remains unresolved, the student may then file an appeal with the appropriate Academic Dean, who will seek formal reconciliation. Appeals made to the appropriate Academic Dean must be in writing and must include written documentation from each stage of the appellate process. The Dean will investigate the case, hearing both the student and the faculty member and will render a decision. A student challenging the Dean's decision must file an appeal to the Vice-President of Academic Affairs (VPAA). The VPAA will investigate the case, hearing from the student, the faculty member, and the Dean, and will render a final decision.

In order to ensure that a student has access to all levels of appeal, and that all appeals are completed within the one year statutory limit, a student challenging a course grade must file an appeal according to the calendar shown below, following the timeline for the semester in which the grade was earned. Students missing these deadlines are welcome to pursue an appeal but cannot be guaranteed access to the full appeals process within the one year statutory limit for grade changes.

	Fall course	Spring course	Summer course
Faculty member records grade	Grades Due Date of current semester	Grades Due Date of current semester	Grades Due Date of current semester
Student emails faculty member with appeal	Drop/Add deadline of spring semester	Drop/Add deadline of fall semester	Drop/Add deadline of fall semester
Faculty member responds in writing	Spring Incomplete Grade Due Date	Fall Incomplete Grade Due Date	Fall Incomplete Grade Due Date
Student appeals to Chair in writing	Spring Withdrawal Date	Fall Withdrawal Date	Fall Withdrawal Date
Chair responds in writing	Spring Final Grades Due Date	Fall Final Grades Due Date	Fall Final Grades Due Date
Student appeals to Dean in writing	30 calendar days	30 calendar days	30 calendar days

Dean responds	Following Fall Incomplete Grade Due Date	Following Spring Incomplete Grade Due Date	Following Spring Incomplete Grade Due Date
Student appeals to VPAA	Following Fall Withdrawal Date	Following Spring Withdrawal Date	Following Spring Withdrawal Date
VPAA responds	30 calendar days	30 calendar days	30 calendar days

Dean's List (Fall and Spring Semesters) - Undergraduate

To qualify for the Dean's List, a full-time, degree-seeking undergraduate student must achieve a semester grade point average of 3.5 or above and successfully complete a minimum of 12 credits for a letter grade. Maymester courses do not count toward the 12 credits in the spring semester.

Students who are enrolled in integrated degree programs are eligible for the Dean's List only if they are taking 12 credits of undergraduate coursework in a semester. Eligibility is calculated using the semester grade point average from the undergraduate courses only.

Program Honors - Undergraduate

Program honors are awarded to students who distinguish themselves in their major field, interdisciplinary area, or multiple disciplinary concentration. Those honors are awarded at the discretion of the student's major program advisor and approved by the department chair or program director. The minimum standard for program honors is a 3.0 cumulative GPA, a 3.5 GPA in the major or program, and an exemplary capstone performance. Students with interdisciplinary or double majors must meet the requirements for honors in each discipline in order to be eligible for program honors.

Academic Calendar

The 2022-2023 calendar for each school will consist of two primary 15-week semesters, as well as a 15-week summer semester. Each semester may also include multiple sessions of seven-week duration. A supplemental calendar may be produced for the Summer Semester or other. [Click here for a complete calendar for this academic year.](#)

Academic Credit

A credit hour is the unit of academic credit for all courses. One credit hour is the equivalent of one semester hour. Credit hour graduation requirements are specified by each degree program.

For each credit hour, Chatham University requires the equivalent of 50 minutes of classroom instruction per week and a minimum of two hours of out-of-class student work, per credit hour for a given term. This is based on the Integrated Postsecondary Education Data System (IPEDS™) definition for credit hour, which states that a credit hour is a unit of measure representing the equivalent of an hour (50 minutes) of instruction per week over the entire term.

Chatham also adheres to the Federal standard of total expectation of total learning hours in a semester regardless of the time frame for delivery. This means that a course delivered over 15 weeks or over 7.5 weeks will have the same total minutes of instruction.

Academic Overload

UNDERGRADUATE

A schedule of more than 19 credit hours in any one semester is considered an academic overload. If a student with a GPA below a 3.0 enrolls in more than 19 credits, they will receive an academic review by their advisor and academic dean. As a result of the academic review, a credit load reduction may occur. Enrolling for more than 21 credits is considered financial overload. Students on financial overload will be charged additional tuition for every credit in excess of 21 credits at the University's current per credit rate for undergraduate students. Please see the tuition and fee schedule for the current academic year rates.

GRADUATE

Unless otherwise specified, a student pursuing a graduate degree who is registered for more than 12 (19 for MPAS, MSBIO, MOT, and DPT) credits in any one semester is considered to be on academic overload. To qualify for such an overload, a student must be in good academic standing with a cumulative grade point average of 3.0 or above and have signed approval from the Program Director and appropriate academic dean. Academic overload is determined by the total number of credits for which a student is registered during one semester, irrespective of whether the student is enrolled in a master's program, integrated degree program, or dual master's degree program.

Class Standing - Undergraduate

Class standing is determined by the number of credits earned at Chatham or transferred to Chatham.

- 0-14 credits First-Semester, First-Year Student
- 15 – 29 credits Second-Semester, First-Year Student
- 30 – 44 credits First-Semester Sophomore
- 45 – 59 credits Second-Semester Sophomore
- 60 – 74 credits First-Semester Junior
- 75 – 89 credits Second-Semester Junior
- 90 + credits Senior

Course Substitutions

All students must fulfill the minimum program credit requirements. Substitutions for graduate courses can be considered via completion of a Course Substitution Form which is to be approved by the appropriate department chair or program director and academic dean. Substitutions for undergraduate courses can be considered via completion of a Course Substitution Form which is to be approved by the appropriate academic advisor and the department chair/program director.

Dual Graduate Degrees

Students may enroll concurrently in two master's programs or consecutively in multiple programs or certifications by separate application to each program based on the following guidelines:

Some graduate courses are equally applicable to two or more graduate programs. Chatham graduate students can apply relevant courses to two masters' degrees under the following circumstances:

- Credits must be approved by the Director of the program where credits are being sought;
- Each student must complete at least 30 graduate credits that are unique to that program. In cases where a student is completing two master's degrees that each require 30 credits for completion, a maximum of six credits may be counted toward both degrees.
- The program director accepting the credits must ensure that the program of study remains consistent with quality standards for that profession or discipline. In no circumstance will a program director permit acceptance of credits to compromise applicable licensure, certification, or accreditation standards.
- Students who have already earned a master's degree from Chatham may apply credits toward a second master's degree at Chatham according to the above guidelines only if they obtained the first degree within four years prior to the semester in which they begin their course of study for the second degree.
- Students may not enroll in more than two master's degree programs simultaneously.
- Credits from one course may not be applied to more than two degrees. (Credits applied to both an undergraduate degree and graduate degree may not be applied to a second undergraduate or graduate degree).

Graduate Courses for Undergraduate Credit

Qualified, matriculated, undergraduate students with senior class standing not enrolled in an Integrated Degree Program may receive permission to take up to six credits of 500-level graduate courses relevant to their program of study. Students must receive permission from their undergraduate academic advisor, from the appropriate graduate program director, and from the appropriate academic dean. The student is expected to perform graduate-level work. These graduate credits count toward the undergraduate degree and may not be applied to a graduate degree or program.

Students enrolled in an Integrated Degree Program are permitted to take a maximum of 12 graduate level credits which may be counted towards both the undergraduate and graduate degrees simultaneously. A student will have to complete a Course Substitution Form to have these credits to count for a major requirement.

Independent Study

A student may register for only one independent project per semester. Independent study options are available in all academic programs. Credit values for independent study are one, two, three, or four credits. An application for an independent study must include a correctly labeled current syllabus. Additionally, the nature, frequency, mode and documentation of contact with the supervising faculty member should be explicitly defined, and the number of credit hours associated with the study should be justified.

UNDERGRADUATE

Up to 18 credits of independent study may count toward the 120 credits needed to graduate.

GRADUATE

Graduate independent studies may only be available and approved after a consultation with appropriate Program Director.

Non-Degree Seeking Credit Policy

Credit Policy for Non-degree Seeking Students (also applies to Dual Enrollment, Certificates, or Enrichment Course Takers)

Students seeking to take courses without enrolling in a degree-granting program may take up to 24 undergraduate credits. A hold will be placed on the student's account after 18 credits, and students will need to contact the Advising Office (advising@chatham.edu) in order to register for additional credits. In order to continue taking classes after completing 24 credits, students who are in good academic standing either must apply and be accepted into a degree program, or self-identify as "enrichment course takers" (defined as students taking courses who do not intend to earn a degree) by informing the Office of Academic Affairs. All students must maintain a 2.00 cumulative grade point average in order to continue taking classes.

Enrichment course takers who have earned more than 24 credits and who then wish to earn a degree must apply for admission. If the student is accepted for the degree, then the eligibility of coursework must be approved by the college of the intended major. Enrichment course takers may continue taking courses in nondegree status beyond the 24-credit limit as long as they maintain a 2.00 cumulative grade point average; however, credits beyond 24 may not necessarily apply if the student changes to degree-seeking status.

Chatham University does not request or evaluate transcripts for non-degree-seeking students.

Non-degree-seeking students wishing to enroll in classes that have prerequisites must get special permission from the department offering the class.

NDS students who have undergraduate degrees may take graduate courses with permission of the director of the appropriate program(s). They may be able apply up to 20% of earned graduate coursework to a Chatham graduate program, upon admission to that program.

Please note that non-degree seeking students are not eligible for financial aid through the Federal Stafford Loan Program.

These policies do not apply to non-degree students with faculty or staff status; please check with Human Resources for policies applying to employees.

Statute of Limitations

Undergraduate students enrolled in the RN-BSN Program are required to successfully complete all degree requirements within eight years after the starting date of their first enrolled core required RN-BSN course. A student with extreme circumstances may submit a time-sensitive statute of limitations appeal to the Nursing Program Director and Nursing Academic Advisor. Extensions must be sought prior to the eight year limit expiration.

Graduate Students enrolled in a graduate program are required to complete all degree requirements within five years for a two year program and within eight years for a four year or longer program after the date of first enrollment in the program. Students are advised to review their program handbook for additional policies regarding the statute of limitations. A student with extreme circumstances may submit a time sensitive statute of limitations appeal to the appropriate Program Director and faculty advisor. Extensions must be sought prior to the five- or eight-year limit expiration.

Summer Study

Summer classes at Chatham University are open to students matriculating at Chatham or at other institutions of higher education, students entering college, non-degree seeking students, and accelerated high school students. Courses are typically available online.

Chatham students can also petition the appropriate academic dean for permission to register for courses at another accredited institution during the summer. Students should complete a "Study at Another Institution Application" form available in the University Registrar's Office. If approved, students may register for courses at another accredited institution and pay that institution's tuition charges. After final grades are awarded, the student must submit to the University Registrar an official transcript showing the course and final grade. After review, credits for approved courses will transfer to Chatham, but the grades will not.

Bachelor Degree Overview

UNDERGRADUATE STUDIES

Chatham's undergraduate programs prepare students to excel in their professions and be engaged, environmentally responsible, globally conscious, life-long learners, and citizen leaders for democracy.

The curriculum is designed to develop students with:

- **A strong grounding in the sciences and liberal arts;**
- **The ability to communicate effectively;**
- **Social consciousness;**
- **Awareness and understanding of the environment;**
- **Interest in public service;**
- **Understanding of and appreciation for international dynamics and cultural differences.**

During the undergraduate program of study, students' personal, professional, and leadership skills are developed to their fullest potential through internships, study abroad, service-learning and leadership training opportunities, and personal development seminars. The curriculum, delivered through coursework and a wide variety of academic experiences, as well as the co-curriculum delivered through programming through student life, athletics, and on-campus work experiences, contribute to an integrated and holistic learning experience.

Chatham Undergraduate College offers strong preparation for law school, medical school, and science-based graduate programs as well as the other graduate degree programs. Integrated degree programs allow students to enter the Chatham Undergraduate College and continue through to completion of a graduate degree through the Schools of the University. Chatham University welcomes international students from many areas of the world who enrich the experience for all. The University also welcomes transfer students from other institutions who decide to make Chatham their academic home.

Based on its unique heritage and the strengths and commitment of the Faculty and Staff, a Chatham education is supported by the institutional mission. These attributes are woven throughout the curriculum

and are championed by our centers and institutes.

- International and Global Understanding
- Sustainability and the Environment
- Engagement and Responsibility

BACHELOR'S DEGREE REQUIREMENTS

The Bachelor's degree at Chatham may be earned by fulfilling the following requirements:

- The satisfactory completion a minimum of **120 credit hours**.
- The completion of a minimum of **30 of their last 36 credits** in residence at Chatham University.
- The satisfactory completion of 40 general education credits and all **general education requirements**;
- The satisfactory completion of an **approved major**; **50%** of which must be completed at Chatham;
- The satisfactory completion of the **Integrative Capstone** seminar and six credits of designated writing-intensive courses in the major;
- A **grade of C-** or higher earned in all courses counting towards a major or minor;
- The satisfactory completion of the **Chatham Plan Professional Edge**, including an internship, as designated by your major;
- A cumulative grade point average (GPA) of **2.0 in all coursework**;
- A student must earn a minimum **GPA of 2.0 or above within their major** program of study. Some programs may impose a higher minimum GPA per licensure and accreditation requirements.

Integrative Capstone: This course, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theatre production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Chatham Plan Professional Edge: Students explore professional careers related to their major or the preparations needed for graduate school. These seven credits include Professional Development Skills, Job Skills, Professional Development, and an internship as designated by the major. Transfer students who are exempted from SDE 101 (1 credit) must still complete the final six credits of the Chatham Plan Professional Edge. Three-credit graded internships, with a grade of C or better, may be considered for transfer credit. Internships graded on a pass-fail basis may be accepted after additional review. Under almost all circumstances, students will complete the 3-credits of Chatham Plan coursework at Chatham.

Proration of PRO Requirements:

- If a student transfers in 12 credits, SDE 101 is waived.
- If a student transfers in 30-59 credits, SDE101 and 1 PRO credit is waived (student will need to complete a three-credit internship and 2 PRO credits in at least one course).
- If a student transfers in 60 or more credits, SDE101 and 2 PRO credits waived (student will need to complete a three-credit internship and 1 PRO credit in at least one course).

Communicating Across the Curriculum: Each student must complete 6 credits of writing-intensive coursework in their major. These courses feature a discussion of writing concurrent with its regular practice through coursework. Oral communication and informational literacy skills are embedded in each major. Ethics is also taught in communicating across the curriculum courses (information literacy) and in major courses.

Second Degree

Students who have already earned a bachelor's degree from an accredited institution of higher education may complete a second bachelor's degree at Chatham by fulfilling the following requirements:

- The satisfactory completion of an **approved major** in a field different from that of their first degree;
 - For RN-BSN students, the approved major is the completion of 26 credits (maximum 94 transfer credits will be accepted)
- The satisfactory completion of the **integrative capstone**;
- A grade of **C- or higher** earned in all major courses;
- A cumulative **GPA of 2.0** in all course work;
- A student must earn a minimum **GPA of 2.0 or above within their major** program of study. Some programs may impose a higher minimum GPA per licensure and accreditation requirements. **Second degree students are exempt from general education and core requirements.**

General Education Curriculum

Chatham University's General Education curriculum provides courses that cumulatively impart the broad skills needed for students to build lives of purpose, value and fulfilling work and immerse students in Chatham's mission initiatives: Engagement and Responsibility, Global and International Understanding, and Sustainability and the Environment.

To be able to adapt to changing circumstances, students must be able to learn, investigate, analyze, and make reasonable and ethical choices. This is learned by building knowledge and skills in broad areas that will give students a basis of understanding that they will use to deal with problems and situations they encounter throughout their lives. Chatham's General Education curriculum, in accordance with the guidance of Middle States, is designed so that students acquire and demonstrate essential skills including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy. Consistent with mission, the general education program also includes the study of values, ethics, and diverse perspectives (<https://www.msche.org/standards/>).

The following perspectives are reinforced throughout the General Education curriculum:

- The intellectual habits of writing, oral communication, and information literacy;
- Cross-disciplinary understanding as a foundation for collaborative work and community engagement;
- Knowledge of diversity, equity, and inclusion as it relates to the unique lived experience of individuals and their social identities;
- Knowledge of the natural environment, the principles of sustainability, and our place in global ecosystems;
- A general understanding of and appreciation for international places, cultures, arts, and people that enrich our lives;
- Acquisition of the characteristics to be an informed and engaged citizen, including preparation for the workplace and the skills necessary to be a life-long learner.
- A breadth of understanding of disciplines outside one's major, and depth in at least one area outside of the major.

Additional information about specific ways to fulfill these requirements are listed elsewhere in this Catalog.

General Education Course Requirements

Courses satisfying the general education requirements must be taken on a regular letter grade basis except in cases where pass/fail grading is the only option. If a student fails a general education course, they must retake and pass the course or an appropriate approved substitute.

The Pennsylvania Department of Education requires undergraduate students to complete a minimum of 40 credits of general education. Individual classes may satisfy only one general education requirement. No more than two classes may fulfill both a requirement in general education and in any major or minor (does not apply to "depth of understanding" requirement). In interpreting the general education requirements, a "science with lab" is considered one class even if the lab portion has its own course number. However, it must be the lab that is associated with the lecture portion of the course.

Students graduating with a BSN degree may:

- Satisfy some general education credits via articulation agreement with their school of nursing. Students may not be able to see a credit-for credit course satisfaction for general education courses on their transcripts.
- Have more than two classes fulfill both a requirement in the major and a general education requirement.

Strategies for Success in College

SDE101: Strategies for Success in College. This course provides first-year students with strategies necessary to transition successfully to the college environment. The course introduces students to the Chatham community, its culture, and its traditions. Additional topics relevant to the first-year experience are also considered. All first-year students attending college for the first time will be enrolled. College in high school/dual enrollment credits do not count toward exemption of SDE101; only Gateway students and transfer students with 12 or more credits earned in degree seeking programs after high school are exempt from SDE101. Appeals to this rule should be sent, in writing, to Advising@chatham.edu.

- Students will understand and implement the academic skills, strategies, and support programs important for success in college.
- Students will understand their own strengths and skill sets to better manage their personal growth and development.
- Students will be able to identify campus/community resources and opportunities for engagement at Chatham University and in the Pittsburgh area.
- Students will understand and appreciate the role service learning and ethical citizenship play in their college education.

Written Communication

- Students will be able to produce coherent, focused, organized, clear and correct written documents using general academic conventions as well as appropriate discipline-based conventions.
- Students will be able to use the tools of persuasion to reach a variety of audiences

ENG105 First Year Writing. This introduction to college composition covers analytical and argumentative writing, oral presentation, critical reading, information literacy, and academic integrity. The course employs active-learning pedagogy of discussion and dialogue and examines intersections of race, gender, class, ethnicities, and systems of belief through the lens of relevant topics. Students who need additional support with writing skills beyond what is normally covered in the classroom (based on a diagnostic writing exam required before matriculation) will require Supplemental instruction through the PACE Center. Students with transfer credits may meet the requirement for ENG105 with the transfer of a college-level composition course or AP/IB credit. Students must also complete two writing-intensive courses within the major.

Oral Communication

- Students will demonstrate the ability to formulate opinions and support and defend them effectively
- Students will demonstrate the ability to articulate ideas, reach, and persuade a variety of audiences.
- Students produce an effective presentation using a variety of strategies and technologies.

Information Literacy

- Students will demonstrate the ability to locate information sources, including electronic sources, and the ability to analyze, interpret, and evaluate their quality/reliability.
- Students will demonstrate the ability to conduct research using a variety of strategies and sources.
- Students will produce an effective written document analyzing and synthesizing research materials and leading to a conclusion supporting an argument or hypothesis.

Quantitative Reasoning

Quantitative reasoning courses are intended to help students develop their ability to understand information presented in mathematical terms and to use quantitative methods to answer questions and solve problems. Students must complete a course on college algebra, statistics, or above. Transfer students may meet the quantitative reasoning requirement may with a Chatham course or other transfer course on college algebra, statistics, or above

- Students will demonstrate numerical fluency.
- Students will demonstrate the ability to develop and evaluate the appropriate problem-solving strategies for a variety of situations, issues, and events.
- Students will demonstrate the ability to test and apply correct solutions to problems.

Wellness

Students are required to earn 2 Wellness (WEL) credits over 2 courses which will include two of the following three learning outcomes:

- Students will demonstrate an understanding of holistic fulfillment, and its place in their lives
- Students will demonstrate knowledge of fitness activities that could be continued throughout the lifespan
- Students will demonstrate knowledge of practices and activities which will enhance their health and well-being and know how to implement those practices and activities in their everyday lives and in the lives of others

Professional Preparation

Students are required to earn three (3) **Professional Preparation** (PRO) credits over at least two (2) courses which will include one of the following two learning outcomes:

- Students will create documents or projects that ask them to reflect on the development of their own professional competencies. (Good examples of reflective projects include journals, blogs, reflective essays, introductions to portfolios, etc.)
- Students will create documents or projects that will be useful to them in seeking employment or further education (including but not limited to resumes/CV, cover letters, personal statements, portfolios, etc.)

And two or more of the following learning outcomes:

- Students will explore professions related to their field of study and/or methods for obtaining a job.
- Students will identify and explain the importance of ethics, cultural competence, and professional behavior in their profession.
- Students will master a technical skill related to their profession and demonstrate efficiency.
- Students will analyze professional management techniques and strategies.
- Students will apply knowledge and skills learned in their field to solve a related problem in an experiential or project-based setting.
- Students will gain proficiency in a standardized exam or certification process essential to their career path.

General Education Learning Outcomes for Breadth Courses and Upper Electives Requirement

The Chatham general education curriculum requires students to complete a minimum of one course (3-credits or greater) from each of the following four disciplinary perspectives in order to understand diverse ways of knowing and enhance cross-disciplinary understanding. For the purposes of general education, Chatham counts "science course with lab" as one course, even if the lab component has a different course number. The lab must be associated with the lecture portion of the course.

- **ART** (ART, DAN, FDT, MUS, THT)
 - Students will demonstrate an understanding of the principles and elements used in the art form(s) under study.
 - Students will demonstrate the ability to interpret works of art contextualizing them in appropriate frameworks (e.g., social, cultural, political, psychological, environmental, etc.).
 - Students will demonstrate the ability to analyze and interpret works of art using the language relevant to the art form(s) under study.
- **Humanities** (ENG, CST, LNG, PHI, REL, WGS)
 - Students will demonstrate the ability to identify the key concepts and central debates that define the humanities discipline under study.
 - Students will demonstrate the ability to analyze and interpret literary and cultural texts within historical paradigms.
 - Students will demonstrate the ability to identify cultural patterns through the close study of literary and cultural texts.
- **Science** (BIO, CHM, PHY, ENV, SUS, EXS))
 - Students will demonstrate a foundational knowledge of a science discipline
 - Students will demonstrate the correct use of scientific methods as modes of inquiry as well as appropriate use of analytical tools.
 - Students will demonstrate the ability to evaluate scientific evidence.
- **Social Sciences** (ECN, HIS, POL, PSY, CRM, SSC, SWK)
 - Students will demonstrate foundational knowledge of the discipline(s) under study.
 - Students will demonstrate the ability to employ appropriate methods of inquiry to analyze the relationships among culture, institutions, and/or human behavior.

Transfer students may transfer approved courses in each breadth area or fulfill the requirement with approved Chatham courses. Equivalent courses for Art at other institutions include at least three credits in art, music, or theater courses. Equivalent courses for Humanities at other institutions include at least three credits in English, language, philosophy, or religion. Equivalent courses for Social Science at other institutions include at least three credits in economics, history, political science, psychology, or sociology. Equivalent courses for Science at other institutions are an approved science course with lab. Transfer courses for which there is no Chatham equivalent may still be accepted as satisfying the breadth requirement if they are from a discipline broadly associated with the liberal arts. Classes from professionally oriented disciplines cannot fulfill this general education requirement. Equivalent courses for Science at other institutions include at least four credits of an approved science course with lab.

Depth of Understanding (upper level course requirement)

In addition to the breadth course described above, all Chatham students will demonstrate a depth of understanding by completing a minimum of 9 credits of upper-level (200-level or above) elective credits in disciplines outside of their major.

Note that a course related to the major but not required in the major will NOT count as a course fulfilling the requirement. For instance, a chemistry course not listed as a requirement in the Chemistry major curriculum or a Creative Writing course not listed as a requirement in the Creative Writing major curriculum will NOT satisfy General Education Depth Requirement. All of Chatham's upper-level electives are acceptable in this category.

Chatham will accept transfer courses from all areas of study that meet these requirements. Courses taken to satisfy a minor, second major, or IDP program may satisfy the Depth of Understanding Course requirement.

RN-BSN students may satisfy general education depth requirements with any courses outside of the Core program requirements.

Mission Related Course Requirements

The three primary themes of the University mission are **Engagement and Responsibility**, **Global and International Understanding**, and **Sustainability and the Environment**. The General Education program is designed to develop the skills and knowledge of these aspects of the mission. Students take a minimum of one 3-credit course from each of these mission-related areas. If a course is listed under two mission themes, it can only fulfill one theme course.

- **Engagement and Responsibility (EGR)**

- Students will analyze and differentiate such relevant social and political constructs as race, class, gender, ethnicity, rights, and justice, and apply those concepts to the topic(s) under study.
- Students will demonstrate the ability to advocate for their own positions through such strategies as attentiveness to the ideas and struggles of others, strong communication skills, and consensus building.

- **Global and International (GBL)**

- Students will demonstrate understanding of global interdependence and local cultural values from multiple perspectives (e.g., social, cultural, economic, political, environmental).
- Students will demonstrate the ability to critically assess global and local events, processes, trends and/or issues, and be able to place one's own culture in that context.

- **Sustainability and the Environment (SEE)**

- Students will articulate the impact that humans have on the environment and how this affects health and social justice issues.
- Students will describe sustainable processes and evaluate the impact of those processes on social, environmental, and/or economic systems.

Current Undergraduate students may fulfill Mission Related requirements at other institutions through Summer Study but must check with Advising@chatham.edu to confirm that these courses will be accepted at Chatham.

Transfer students will be informed during the transfer evaluation process as to which of their prior courses may fulfill these Mission Related requirements.

Graduate Certificates

Certificates offer an opportunity for concentrated study at the graduate level, as a non-degree seeking student. A certificate recognizes a completion of focused courses in a field, are designed for students wishing to expand their knowledge in a particular subject area. Certificates typically include 12 credits and can be completed in two or three semesters.

[Click here to see list of all Graduate Certificates](#)

Undergraduate Majors

Program Major

All undergraduate students are required to select a major: a program of courses providing an in-depth experience in an academic area. Majors consist of no fewer than 33 credits, including the integrated senior capstone. Some majors may require an Internship in their field as a requirement of the major. A maximum of eight credits can apply to both the major and general education requirements. A maximum of eight credits can apply to both a major and a minor. No course may fulfill more than two requirements among majors, minors, and general education.

Each program determines the requirements for its major. At least 50% of the credits toward the major must be completed at Chatham and a grade of C- or higher must be earned in all major courses. A student must earn a G.P.A. of 2.0 or above within their major. Some programs may impose a higher minimum G.P.A. per licensure and accreditation requirements. The major appears on the official transcript.

Major Declaration

Students may declare a major consistent with their catalog year and change to an academic advisor within that major at any point after admission. They must declare a major before the registration period at the end of their sophomore year. While students are free to change majors as they desire, repeated changes may delay graduation. The longer a student goes undeclared may cause financial aid eligibility issues. Students should consult with financial aid for more information concerning declaring a major.

Interdisciplinary Major

A major may be pursued through concentrated study in two related programs. Such a major consists of a minimum of eight courses in each of the two programs, exclusive of the integrated senior capstone. Individual programs require specific courses in fulfillment of the requirements. The capstone must integrate the subject matter of the two programs. Such a major must be approved by both programs and supported by a full-time faculty member who has agreed to advise the student and direct their program, particularly in the interrelations of the subjects to be studied. At least 50% of the credits toward the major must be completed at Chatham. A student must earn a G.P.A. of 2.0 or above within their major. Courses within the major with a recorded grade below C- must be repeated.

Students may select any two of the following interdisciplinary options: Biology, Business Accounting, Business Economics, Business Management, Business Marketing, Cultural Studies, English, History, International Business, Mathematics, Music, Political Science, and Psychology. Students wishing to do an interdisciplinary major in two business disciplines must follow the guidelines provided in this catalog under the Department of Business and Entrepreneurship.

Self-Designed Majors

Self-Designed Major - A major program also may be pursued through concentrated study of two or more disciplines bearing on a single concern, possibly in disciplines not usually considered related. The major

may be built around a single topic. The self-designed major proposal must be submitted to and approved by a committee of three full-time faculty members in the disciplines most closely related to the proposed major; one member of this committee will serve as the student's academic advisor. The student prepares a proposal for the major that must include, but is not limited to, a statement of educational goals, identification of learning outcomes, and a detailed plan of study including all courses that would apply to the major. The plan of study must adhere to the following guidelines: (1) the major consists of no fewer than 11 courses, including the integrated senior capstone (2) seven of the 11 courses must be at the 200- level or above; (3) at least two full-time semesters of academic work must be completed following the application and approval of the major. When the proposal has been approved, copies of the student's proposal, signed by the members of the committee, are placed in the student's permanent academic record and advising file. Any changes to the plan must be approved by the committee and updated in the student's permanent academic record. At least 50% of the credits toward the self-designed major must be completed at Chatham and a grade of C- or higher must be earned in all major courses. A student must earn a G.P.A. of 2.0 or above within their major.

Double Major

A student may earn a Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Interior Architecture, Bachelor of Science, or Bachelor of Social Work degree with a double major by fulfilling the major course requirements of two majors, the general education requirements of the primary School, and one integrated senior capstone, with a maximum of eight credits that may fulfill degree requirements for both majors. If the two majors are for different degrees, then the student must choose between the B.A., B.F.A., B.I.A, B.S. or B.S.W. degrees. A single senior capstone must integrate the subject matter of the two programs. Double majors must be approved by both programs and must be supported by a faculty member who has agreed to advise the student and direct his/her program, particularly in the interrelation of the subjects to be studied. At least 50% of the credits toward each major must be completed at Chatham and a grade of C- or higher must be earned in all major courses completed after spring 2011. A student must earn a G.P.A. of 2.0 or above within each major.

Double Degree

Chatham University offers the following degrees: Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Interior Architecture, Bachelor of Science, or Bachelor of Social Work. A student may earn two Chatham degrees concurrently by completing all the degree requirements specified by the School of the first major, along with all the requirements for a second major, including a second senior capstone, with no courses fulfilling requirements for both degrees. A student must take an additional 45 credits, for a total of 165 credits. At least 50% of the credits toward the second major must be completed at Chatham and a grade of C- or higher must be earned in all major courses completed after spring 2011. A student must earn a G.P.A. of 2.0 or above within each major.

Undergraduate Major Concentration

Major Concentration

A concentration is a structured plan of study within a major. The number of credit hours for a concentration varies but is included within the credit hours for the major. The concentration appears on the official transcript.

Undergraduate Minors

Program Minor

At their option, a student may pursue one or more minors. A minor consists of a minimum of 15 credits as designated by the program or department. A maximum of eight credits can apply to both a major and a minor. Any number of courses from the minor can apply to General Education requirements. No course may fulfill more than two requirements among majors, minors, and general education. Internships and independent studies may be a part of the requirements of a minor. There are no capstone requirements for the minor. At least 50% of the credits toward the program minor must be taken at Chatham and a grade of C- or higher must be earned in all minor courses completed after spring. A student must earn a G.P.A. of 2.0 or above within the minor. The minor appears on the official transcript.

Self-Designed Minor

The self-designed minor consists of a minimum of five courses in an area of study for which a program minor does not exist. The student prepares a proposal for the minor that includes a title, a statement of the educational goals, identification of learning outcomes and a list of courses that will be included in the minor. Internships and independent studies may be included in the requirements for the minor. The self-designed minor proposal must be submitted to and approved by a full-time faculty member in the discipline most closely related to the proposed minor and at least one department chair. Responsibility for the monitoring of the minor rests with this faculty member; a copy of the approved course list must be submitted to the Registrar's Office at the time of the student's graduation audit. No more than two courses may be double counted toward a self-designed minor and a major. Courses in the minor may also be counted toward the General Education depth requirement. At least 50% of the credits toward the self-designed minor must be taken at Chatham and a grade of C- or higher must be earned in all minor courses.

See appropriate department pages for requirements and courses.

[Click here to see list of all Undergraduate Minors](#)

Undergraduate Certificates

Certificates

Certificates of completion offer another opportunity for concentrated study at the undergraduate level. A certificate recognizes a completion of focused courses in a field, 15-21 credits. They are designed for students wishing to expand their knowledge in a particular subject area. Certificates of completion may be added to any undergraduate major. Undergraduate certificates of completion are not available to non-degree seeking students.

Undergraduate certificates of completion are not to be confused with certifications, such as teaching certificates, which are awarded by governmental and professional agencies. Nor should they be confused with Graduate certificates which are described in the graduate program pages of the catalog.

Available undergraduate certificates are listed below.

Unlike minors, all courses in certificates may also be applied towards General Education requirements and toward any major or minor. The undergraduate certificate of completion appears on the official transcript.

[Click here to see list of all Undergraduate Certificates](#)

Integrated Degrees and Collaborative Programs

Chatham's Integrated Degree Program (IDP) allows qualified students to complete an undergraduate degree within a timeframe that may be less than the traditional bachelor's and master's programs done separately. Students take undergraduate- and graduate-level courses simultaneously beginning as early as the first semester of their senior year. Undergraduate students who expect to participate in an integrated degree program must complete all general education requirements for the baccalaureate degree as well as fulfill all prerequisites and/or competencies. Students will not be enrolled in their graduate program until they have completed a minimum of 108 undergraduate credits, keeping in mind that 12 credits of graduate coursework will count towards both degrees to reach the 120 credits needed for the bachelor's degree. The Athletic Training IDP allows students to complete a minimum of 105 undergraduate credits with 16 credits of undergraduate coursework counting toward both degrees. Please see individual program pages for additional stipulations and requirements.

Students who do not have guaranteed acceptance into an IDP program are limited to a maximum of six (6) credits of 500-level graduate level work (see section on Graduate Courses for Undergraduate Credit).

It is the student's responsibility to apply for degree conferral for their undergraduate degree during the semester in which he/she is completing the final 12/16 undergraduate credits, and this conferral must occur prior to their graduate conferral. These degrees will not be simultaneously awarded. All first-year and transfer applicants are invited to apply to an IDP, as well as current Chatham undergraduate students who are performing well in their academic program(s). For more information see:

<https://www.chatham.edu/academics/undergraduate/integrated-degree-programs/> .

Graduate programs with IDP options:

School of Health Sciences (6)

• Doctor of Physical Therapy • Entry-level Doctor of Occupational Therapy • Master of Physician Assistant Studies • Master of Science in Counseling Psychology • Master of Arts in Psychology • Master of Science in Athletic Training

School of Arts and Sciences (11)

• Master of Fine Arts in Creative Writing • Master of Fine Arts in Film and Digital Technology • Master of Arts in Interdisciplinary Design • Master of Interior Architecture (MIA) • Master of Science in Interior Architecture • Master of Arts in Teaching (MAT) • Master of Education in Special Education • Master of Science in Biology • Master of Business Administration • Master of Professional Writing • Master of Communication

Falk School of Sustainability (2)

- Master of Arts in Food Studies • Master of Sustainability

Please see individual program pages for additional stipulations and requirements. Students are required to complete an IDP intention form (timing depends on the program) and to achieve the required GPA before entering the program. Some programs may require additional paperwork, including additional letters of recommendation (contact Admissions@chatham.edu for more information).

Chatham Honors Program

The Chatham University Honors Program is designed for students who value academic challenges and a chance to explore unique educational opportunities. All first-year students who meet the academic requirements are invited to apply as part of the admissions process; transfer students must have a 3.5 College GPA to apply. Students must maintain a minimum of 3.6 GPA to remain in the Honors Program (one semester grace period will be provided).

For more information see: <https://www.chatham.edu/academics/undergraduate/honors-program.html>

Prior Learning Assessment

Chatham's Prior Learning Assessment (PLA) program grants degree-seeking students the ability to be awarded academic credit for prior learning knowledge gained in advance of enrolling at Chatham. Knowledge gained from employment, job training, independent study, open courseware, volunteer and civic duties, military service and travel are just some examples that may prepare a student to earn credit through our Prior Learning Assessment program. PLA credit may be awarded either through the development of a portfolio or by attaining a passing score on a challenge exam.

Portfolio Development: Based on course-specific learning outcomes, students assemble a portfolio that consists of a written narrative along with supporting documentation that demonstrates a student's proficiency in the course learning outcomes.

Credit-by-Exam: A student may earn credit for a course by meeting established guidelines on standardized or challenge exams as approved by the program or department.

A student may not receive credit by examination for a course:

- which the student has failed
- for which the student has already received credit
- for which the student is presently registered after the add-drop period.

All requests for PLA credit must be made in writing to the appropriate program director or department chair. Per each program, PLA may be unavailable or restricted ([link to list](#)). Please consult with each program director for a list of approved courses.

Undergraduate PLA

Undergraduate degree-seeking students may earn up to 60 credits through the PLA Program. A maximum of 90 credits can be awarded through PLA and transfer credit.

A maximum of 6 credits earned through the portfolio development program may count towards Chatham University's residency requirement.

PLA credits cannot be granted for Health & Wellness courses (PED) or Student Development courses (SDE).

Undergraduate Portfolio Development Fees: \$83 per credit assessed (\$249 per 3-credit course). Undergraduate credit by Exam Fees: CLEP and DSST exams are \$85 per exam plus a \$20 administration fee. Students will be billed at the time that credit is awarded.

Graduate PLA

Chatham University students may earn no more than 20% of their graduate degree requirements through

transfer credit and Prior Learning Assessment (PLA) in specific graduate degree programs.

Graduate Portfolio Development Fees: PLA credit assessed through Portfolio Development will incur a fee in the amount of 50% of the graduate per-credit tuition rate plus college fee. Students will be billed at the time that credit is awarded. The awarding of credit for prior learning occurs upon review of a successful portfolio or other appropriate means and does not coincide with the scheduled offering of a course.

NOTE: The PLA fee is not eligible for federal, state, or institutional financial aid; however, a no interest, no application fee payment plan may be available.

For more information about the Prior Learning Assessment program [click here.](#)

Transfer of Credit

Undergraduate (Pre-matriculation)

Chatham University students may be awarded a maximum of 90 credits through transfer credit (pre- and post-matriculation combined) and Prior Learning Assessment (PLA).

Prior to starting courses at Chatham University, students must provide official transcripts for review from previously attended, regionally accredited institutions. Students will receive an official transfer credit evaluation indicating which credits will transfer into the intended degree program. A student will have 14 business days after the sending of the evaluation to appeal the transfer of credit decision. The appeal must be submitted by email to the transfer coordinator (advising@chatham.edu) and indicate details of the appeal.

General education: Students transferring to Chatham University who have completed a general education program at another regionally accredited institution of higher learning will be considered to have met their general education requirements at Chatham, as long as 40 credits can be assigned to the general education pool, and unless their Chatham major has unique, specific general education requirements. Students who transfer to the University without a complete general education curriculum may receive specified credit towards Chatham general education requirements as determined during the admission process transcript review.

Students transferring to Chatham who have received credit at a prior institution for Advanced Placement (AP) or other standardized tests must submit the original test scores for consideration. Equivalencies at Chatham may not be the same as those awarded by the previous institution, and therefore identical transfer credit may not be awarded.

While the intention of the University is to make the transfer process as easy and as transparent as possible, in some instances it may be necessary for a student to demonstrate that a transfer course satisfies Chatham's general education learning outcomes. The provision of the course syllabus may be an example of a means to demonstrate equivalency of courses.

Policy Stipulations:

- All potential transfer credit in progress or completed prior to acceptance to Chatham must be submitted to the University before the student begins courses. Final transcripts for courses in progress must be received before the end of the first semester of enrollment for consideration. This requirement includes all Advanced Placement (AP) and International Baccalaureate (IB) courses. All official transcripts will be evaluated on an individual basis.
- If student wishes to repeat a course at Chatham for which they have earned AP or other credit, they will be asked to complete the Awarded Credit Removal Request Form.

- College-level courses completed at previous/current institution(s) will be accepted if they are of similar rigor, level, and content to the course offerings available at Chatham.
- Courses taken as pass/fail will only be considered for credit if it can be verified that a pass grade corresponds with a grade of C or better.
- Repeated courses or courses with duplicate subject content will not receive credit.
- No more than 50 percent of the credits required in the selected major or minor may be earned through transfer credit.

Transfer and Readmitted Undergraduate Student Time Limit Policies

There is no expiration date for credits received at Chatham or any other institution. However, over time, material may become outdated or irrelevant, particularly in areas of health, sciences, and technology. In the best interest of student success, transfer courses with a completion date that is more than 8 years old at the time of application or readmission are subject to review by the major department and advising office. Such courses may not be accepted for transfer; for readmission, some courses may have to be re-taken.

If students are re-admitted to Chatham after more than 8 years, they are required to use the General Education and major/minor/certificate requirements listed in the Catalog that is in effect in the semester in which they resume study.

Undergraduate (Post-matriculation)

Undergraduate students at Chatham are typically limited to transferring in a maximum of 16 credits taken at other institutions post-matriculation. This includes summer study (normally a maximum of 8 credits per summer is recommended) but excludes cross-registered courses (taken through OCICU or PCHE). Travel abroad through exchange programs is also excluded from this limit. Chatham University is not required to accept credit from any coursework taken externally post-matriculation without proper approvals on files. Students who leave Chatham without withdrawing and then attend another institution full-time and return, will be withdrawn from Chatham and must be readmitted. Any credits taken while away must then be submitted for review as a part of the readmission process.

If an exception regarding course load or overall post-matriculation credit limits needs to be considered in light of graduation requirements, an Exception to Institutional Policy form will need to be submitted. Any external coursework that is submitted in conjunction with an exception form will be reviewed by the Assistant Vice President of Undergraduate Learning in the Office of Academic Affairs (contact: advising@chatham.edu).

Transfer from Systems on a Quarter Calendar: If a student transfers to Chatham University from an institution that utilizes a quarter hour calendar system, their credits will need to be converted to a semester hour calendar system upon evaluation. Translation of course credits taken on a quarter hour calendar system elsewhere to Chatham University is as follows: 1.5 Quarter Hours = 1.0 Chatham Credit Hours. For example, a 4-credit course at an institution on a quarter system would transfer as 2.67 credits at Chatham. Many general education and major requirements at Chatham require a 3-credit minimum. To facilitate the process, any course that transfers in with credits of 2.0 or above (in an appropriate subject) will meet the requirement to fulfill needed course equivalencies in that area. Students will be required to earn additional credits to meet the total requirements in a particular major, minor, general education, or elective area (but

not necessarily in the specific topic/subject).

Graduate

Chatham University students may earn no more than 20% of their graduate degree requirements through transfer of credit and Prior Learning Assessment (PLA) in specific graduate degree programs (click to list of applicable and excluded programs (pdf)). Transfer credit may only be awarded for learning acquired prior to beginning classes (matriculation).

Prior to starting courses, students must provide official transcripts from previously attended institutions. Chatham University will review all submitted, official college transcripts for graduate transfer credit upon admission. Students will receive an official transfer credit evaluation indicating which credits will transfer into the intended degree program. A student will have 14 business days after the sending of the evaluation to appeal the transfer of credit decision. The appeal must be submitted in writing to the admissions department and indicate details of the appeal.

Chatham University will not typically accept credits in transfer that were completed more than 5 years prior to admission to a graduate program at Chatham University.

Advising

At Chatham, advisors and advisees work together to plan the best program of study for each student. Together students and advisors discuss and explore a student's interests, skills, struggles, and aspirations in the effort to help each student meet their unique goals.

Advising Mission

The objectives of Chatham University's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class opportunities in order to become engaged, environmentally responsible, globally conscious, life-long learners and decision makers. To this end, the advising program strives to meet the following goals:

- To assist students in the consideration and clarification of educational, career, and life goals
- To assist students in developing an educational plan and selection of courses consistent with the student's goals and objectives
- To provide accurate information about institutional policies, procedures, resources, and programs in-and out-of the classroom.
- To assist students in evaluation of progress toward established goals and educational plans
- To assist students in the development of decision-making skills
- To empower and encourage students to be self-directed and life-long learners

Students: Visit [my.Chatham](#) for additional Advising resources.

Undergraduate

ADVISING MISSION

The objectives of Chatham University's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class opportunities in order to become engaged, environmentally responsible, globally conscious, life-long learners and decision makers. To this end, the advising program strives to meet the following goals:

- To assist each student in the consideration and clarification of educational, career, and life goals
- To assist each student in developing an educational plan and selection of courses consistent with the student's goals and objectives
- To provide accurate information about institutional policies, procedures, resources, and programs in-and out-of the classroom.
- To assist each student in evaluation of progress toward established goals and educational plans
- To assist each student in the development of decision-making skills
- To empower and encourage students to be self-directed and life-long learners

ADVISING ASSIGNMENT POLICIES

Initial advising assignments are based on the student's expressed interest area. Advisors work intensely with their advisees throughout the first year, helping them to clarify and identify their interests, values, and goals. Advisors also provide information about University requirements and help students adjust to college-level academic expectations.

Students may declare a major and change to a major advisor at any point after matriculation. They must declare a major before the registration period at the end of their sophomore year. While students may change majors, repeated changes may delay graduation.

PRE-PROFESSIONAL ADVISING

All pre-professional students, regardless of academic field, receive guidance and assistance throughout their academic careers. The University advises students on courses of study, provides information on

professional school admissions tests and requirements, and assists with the application process. Resources about the application process are available through the Career Development office. In addition, a student who intends to enter graduate school in the medical or health sciences should work closely with the pre-health advisor as well as with her academic advisor. A student who indicates an intention to apply for law school admission should work closely with the faculty pre-law advisor as well as with her academic advisor.

Graduate

All new graduate students are assigned to a faculty advisor in their programs. Each program's curriculum implies the need for a conscientious program of academic advising. The responsibility for designing a program of study rests finally with the student. Faculty guidance can make important contributions to the student's process of setting and implementing educational and professional aims. Above all, the faculty advisor can be expected to offer information on the intellectual resources of the College, careful analysis of the student's course of study, and perspective with regard to the student's academic future.

Articulation Agreements

[Chatham University Articulation Agreements](#)

Office of International Affairs

Studying at Chatham

Chatham welcomes qualified international students into its over 40 undergraduate majors and 25 masters and doctoral degrees across its four schools. Students receive a world-class education in [Pittsburgh](#), Pennsylvania?—a dynamic, safe city. For application information, including requirements, visit [Admission & Aid](#). For information about visas and other international support, visit [International Student and Scholar Services](#).

English Language Program (ELP)

The English Language Program (ELP) at Chatham University is known for exceptional personal attention and strong commitment to student success. After finishing the English Language Program, qualified students may start an undergraduate or graduate program at Chatham University without having to take a TOEFL or IELTS test. Download the [brochure](#) for more information about the program and [apply today](#).

Pittsburgh Pathways

Pittsburgh Pathways is a program of study to prepare non-native English-speaking students to attend a degree program at Chatham University or another university. Qualified students take a combination of 100-level ESL courses and academic courses. These courses will transfer to the students' undergraduate degree at Chatham University. [Learn more](#).

Chatham Semester

The Chatham Semester is open to international undergraduate students to study abroad at Chatham University for one to three semesters. With a highly reduced tuition rate and many course options, Chatham Semester is an excellent choice for partner universities and students from all over the world. [Learn more](#).

Chatham International Internship

Qualified students are invited to follow their one or two terms through the Chatham Semester with professional experience as a full-time intern (normally 40 hours per week). [Learn more.](#)

Short-term International Programs

Short-term international programs are open to students, faculty, and staff from partner universities. The program can be as short as one week and as long as you desire. Programs can focus on different topics and skills, such as international cuisine, U.S. business and entrepreneurship, and English language teaching.

Activities & Engagement

Whether you are studying in your home country or in another country, international education is possible through engagement in activities with people from other countries with diverse cultures. The Office of International Affairs offers many international activities throughout the year to engage the Chatham community in the exchange of languages, cultures, and perspectives. [Learn more.](#)

Education Abroad

Education Abroad provides opportunities for international learning experiences which inspire academic and professional development and foster an understanding of global diversity. [Learn more.](#)

Global Focus Program: *on hiatus 2022-2023*

The award winning Global Focus program seeks to instill global competence in Chatham students by leading a campus-wide initiative focused on a specific country or region of the world over the course of an academic year through the curriculum, films, lectures, performances and cuisine. The program also promotes cross-cultural understanding by forging connections with off-campus international initiatives in the greater Pittsburgh area and beyond.

International Student & Scholars Services

International Student and Scholar Services assists in meeting the educational and professional goals of international students and scholars through immigration advising, cross-cultural programming, advocacy on campus, and information on engaging in the campus and local community. [Learn more.](#)

Office of Student Affairs

The Office of Student Affairs & Dean of Students is an umbrella office located in Woodland Hall, overseeing Counseling and Health Services, Residence Life, and Student Engagement. We are committed to building a vibrant and inclusive student experience through creative programs, professional development, leadership opportunities, and creating a safe and healthy environment. For more information, please [email](#) or call 412-365-1286.

Non-Academic University-Initiated Leaves

Chatham reserves the right to require a student to take a University-initiated leave of absence, suspension, or dismissal for non-academic reasons following a review by the appropriate University authorities. This action, which requires the student to be away from the University for a specified period of time, is taken in the best interest of the student.

Upon the recommendation of the Judicial Board for Honor Code – Student Behavior and Conduct Hearings and/or the Vice President for Student Affairs/Dean of Students, the University may require a leave of absence, suspension, or dismissal at any time if it is deemed reasonably necessary to protect the student, other students, members of the University community, or the interests of the University itself.

If a student does not fulfill the terms of the University-initiated leave of absence, it will result in a suspension or dismissal. Students who are dismissed are not permitted to return.

When a student who has been placed on a required leave of absence or suspension wishes to return to the University, the student must apply in writing to the Vice President of Student Affairs/Dean of Students at least one month in advance of the return. The student will not be permitted to return to the University until the appropriate staff members provide validation.

If the student is approved to return, staff members may make recommendations to the University regarding conditions of return and/or continued enrollment.

Students who are required to take and fulfill the terms of the University-initiated leave of absence or suspension are able to submit for a Medical Schedule Cancellation/Withdraw.

Medical Schedule Cancellation/Withdraw

Medical Schedule Cancellation/Withdraw

Due to an extreme personal medical situation, a student may seek a Medical Schedule Cancellation/Withdrawal. Medical Schedule Cancellations/Withdrawals require supporting documentation from a Medical Professional and approval from the Dean of Students in consultation with the Director of the Office of Academic and Accessibility Resources. Students are only permitted to receive a maximum of two during their enrollment at Chatham. Undergraduate students who return/continue as graduate students may apply for an exception for a third Medical Schedule Cancellation in extreme circumstances.

Academic Progress

Medical Cancellations/Withdrawals are available to support students in extreme medical situations, but they will impede student progress. The student should consult with their Academic Advisor to understand the implication a medical cancellation will have on their degree completion.

Transcript Information

Upon completion of the Medical Cancellation/Withdrawal Form, the student's scheduled courses in the current semester will be cancelled (removed from the transcript) or recorded on the transcript as W, depending upon the timing of the request as follows:

- Submitted prior to midterm grades: Cancellation
- Submitted before the end of term, but after midterm grades: W

Account and Financial Aid

Students seeking Medical Schedule Cancellation/Withdrawal should speak with the Financial Aid Department to understand the impact a Medical Cancellation/Withdrawal will have on any financial aid received or future eligibility/limits. Students who file a Medical Cancellation are eligible for the following adjustments to their Student Account:

- Submitted prior to midterm grades: Full refund
- Submitted in Week 7-10: 50% refund
- Submitted Week 11 or later: No refund

Note: 7.5-week courses will be considered for the full refund, provided that paperwork is submitted in full no later than one week prior to the last day of classes.

Students may be eligible for a compassionate review of their student account and fees for full or partial refund if submitting the request after week 7. Students should attach the request explaining their financial situation to their submitted form. All financial compassionate requests will be reviewed by a committee, including the Dean of Students, Assistant Vice President for Finance, Director of Student Accounts, Director

of Financial Aid, and the Director of the Office of Academic and Accessibility Resources.

Deadline to request Medical Schedule Cancellation:

The Medical Schedule Cancellation/Withdrawal Form and all supporting documentation must be received and completed in full no later than one week prior to the end of the term in which the Medical Cancellation is submitted.

End of term is defined as the last day of classes as noted on the Academic Calendar.

The deadline for Medical Schedule Cancellation for the 2022-2023 Academic fall and spring 15 week terms are: Fall 2022: Friday, December 2 Spring 2023: Friday, April 14

Duration of Medical Schedule Cancellation:

Duration of the leave will depend upon the time the student needs for treatment and/or recovery and should be determined in consultation with the care provider. Students may not return during the same semester when the leave was taken and must adhere to guidelines when returning.

Students who remain inactive for more than one year will be automatically set as “withdrawn” in the University system. These students will need to reapply for admission through the Office of Admissions upon returning from Medical Schedule Cancellation/Withdraw. Students who are automatically withdrawn may still need to create a personal plan of return with Student Affairs as part of their admission.

Return to Chatham

Successful return from a semester(s) off for Medical Schedule Cancellation involves careful coordination and planning. The Dean of Students/Office of Student Affairs will support students in their return. Students will be required to submit the Return from Medical Cancellation/Withdraw Form along with medical documentation a minimum of one month prior to the term they wish to resume studies. Students may be required to participate in a care plan (meeting regularly with OAAR, Counseling, Advisor, etc.) as part of their return process, as the intention of the University is to prioritize the student’s health and wellbeing for successful progression toward degree completion.

Medical documentation must come from a medical/behavioral health professional who is not a parent/guardian or extended family member and show sufficient evidence that the student is ready and able to resume their coursework. Once the Dean of Students approves the student to return and a return plan, the student will consult with their academic advisor before registering for courses. Failure to complete the return plan throughout the first term may impact a student’s eligibility for future Medical Cancellations/Withdraws.

Office of Academic & Accessibility Resources (OAAR)

Chatham University is committed to ensuring that education is accessible, equitable, and inclusive of all individuals with a desire to learn. The Office of Academic & Accessibility Resources (OAAR) has multiple purposes, all with the goal of helping students achieve their educational objectives. Services offered include:

- Support services for students needing accommodations for documented conditions and disabilities (temporary or permanent)
- General academic support including free tutoring, writing specialists, and workshops to improve study skills, time management, etc.
- Offering courses to provide structured academic support, especially for First-Year students including:
 - IND101 Foundations of Learning: Theory & Application (1 cr, 7.5 weeks, offered every term)
In this course, students will learn the science behind how our brains learn, the significance of a growth-mindset, and how to become creators of their own success through active learning. Additionally, students will learn practical and engaging strategies for note-taking, active reading, time management, test-taking, and other study strategies.
 - COR145 Foundations of Effective Writing (1 cr 15 weeks) Students enrolled in ENG105 are required to take this course, unless they meet a minimum score on an exemption exam.
This course is designed to provide writing support and instruction for any student enrolled in a writing-intensive course, including ENG105. Supplemental instruction focuses on the development of writing skills necessary for successful completion of the College Seminar and applicable to other courses across the curriculum.

For more information visit our web page at:

<https://chatham.edu/academics/support-and-services/office-of-academic-accessibility-resources/accessibility-resources.html>

The Jennie King Mellon Library

The Jennie King Mellon Library serves the Chatham community as the primary research, study, and resource center. Students may access the library's collections via the library's website at library.chatham.edu. The collection includes over 100,000 print volumes, more than 289,000 periodical titles - most of which are available online - over 300,000 eBooks and nearly 70 electronic databases. Chatham students also have access to the vast collections of regional and national colleges and universities through the library's consortia memberships that allow for interlibrary loan.

Librarians offers a wide variety of information and instructional services, including chat reference, individual research consultations, database searching workshops, and course-related instruction. All of these are aimed at teaching students to become scholars and skilled at locating, evaluating, and using information in all formats. Professional librarians are available all hours the library is open to answer questions, help with research papers or projects, and show users how to find and use library and other information sources.

The JKM Library also houses the University Archives & Special Collections department. It provides students with the unique opportunity to explore primary source research methodology and access to rare and fine book collections. Online portals to digitized archival collections and face-to-face research instruction encourage active investigation into regional history and engagement in digital humanities research.

Please see our website for more detailed information. <http://library.chatham.edu/>

Technology Resources

Chatham offers a range of technology tools and services to support students, faculty and staff on campus. Visit the Tools and Resources page at <https://chatham.edu/academics/support-and-services/tools-and-resources.html> for an overview of the tools in use.

Chatham also offers a full service Help Desk and support for online learning, course software, equipment, laptop devices and more.

Career Development and Preparation and Internships

Chatham's Office of Career Development offers a broad range of services, programs, and resources to aid in career exploration and professional development.

Finding On-Campus Employment

Whether you're looking to search for on-campus employment or to make an appointment with a Career Development consultant, [Handshake](#) is the tool you need. This online job and internship posting database is updated daily and features thousands of position postings every year. Campus employment is open to all students with priority application periods designated for students receiving Federal Work Study (FWS) awards. Question about your FWS eligibility? Contact the [Office of Financial Aid](#).

Classroom Presentations & Workshops

The following is a list of topics that can be tailored to your group, class, or field of study. Presentations are interactive and we can create assignments related to these topic areas as requested. Our full event schedule is available on Handshake to current Chatham students.

- Graduate School Planning and Internships and Experiential Learning
- Resume and Cover Letter Writing, Interview Skills/Preparation, and Informational Interviewing
- LinkedIn & Networking, Mentorship, Job Search Strategies, and Professional Onboarding
- Professional Competencies, Promotions and Negotiations, Leadership and Followership, and Professional Goal-Setting
- Developing and Articulating Your Professional Identity and Business and Professional Etiquette

Programs & Events

Many of the topics we cover in Career Development lend themselves to effective, engaging programs. We can tailor and facilitate any of the following programs to meet the needs of your group or class:

- Resume and Cover Letter Writing Workshop
- Mock Interviews and Interview Skills and Strategies Workshop
- Etiquette Dinners, Dress for Success, and Job Shadowing
- Career Diversity Dialogues, Panel Presentations, and Invited Speakers
- Internship 101 Workshops and Internship Preparation Workshops

Our full event schedule is available on Handshake to current Chatham students.

Internships & On-Campus Employment

We offer tools, resources, and programs for students completing internships and those with on-campus jobs, but we can also tailor programs related to these initiatives as requested. Potential programs may include:

- Articulating your Internship/Student Employment Experience
- Developing Technical, Interpersonal, and Conceptual Skills through Internships/Student Employment

Competency Development

The Career Development Competency model highlights four major competency areas critical to success in organizational life. Some of the programs and resources we offer related to the competency model are:

- Competency Assessment and Goal Setting (can be tailored to specific field of study, group, or experience)
- Competency Development Workshops: workshops or presentations on specific competencies or the model as a whole

Welcome Aboard Mentorship Program

The Welcome Aboard Mentorship Program offers students the chance to be matched with a Chatham Alumna/us or local professional who will share their experience, offer support, and provide guidance. [Learn more.](#)

The Women's Institute

The Women's Institute continues the legacy of Chatham University's historic commitment to women's leadership and gender equity. We serve as a hub to draw together the university's broad range of gender initiatives, resources, and academic programs. Through education, research, and outreach, we work across campus and into the community promoting social, political, and economic equality. Women leaders thrive at Chatham University. We were ranked in the [top three schools nationwide for aspiring women leaders](#). And *TIME* Magazine named Chatham's most famous alumna, the environmental pioneer Rachel Carson '29, one of the most powerful women of the 20th century.

To visit The Women's Institute page, [click here](#).

The Center for Women's Entrepreneurship at Chatham University

Mission

The Center for Women's Entrepreneurship at Chatham University creates economic opportunities for women through entrepreneurial counseling, education and training. Building on Chatham University's tradition of educating women for 150 years, The Center for Women's Entrepreneurship at Chatham University has provided high quality education and training for women entrepreneurs since 2005.

The Center for Women's Entrepreneurship at Chatham University (CWE) is funded in part by a cooperative agreement with the U.S. Small Business Administration (SBA) to provide services geared specifically to women and underserved populations, minority entrepreneurs and veterans throughout Western Pennsylvania. CWE offers aspiring and existing business owners free or low-cost business counseling, training programs, technical support, networking and mentoring focused on business planning and leadership, marketing, financing, access to capital, federal contracting, and business expansion through international markets and exporting. CWE offers a suite of programs for early stage to established stage businesses. CWE's signature programs include, Concept to Launch, Women Business Leaders Breakfast Series, IncubateHER, Roadmap to \$1MM+ and Membership. With the support of the SBA Women's Business Center award in 2016, CWE expanded its programming to offer free one-on-one business counseling and technical assistance.

CWE designs and implements programs and services that are targeted to women in underserved communities and the challenges they face in starting, growing, and succeeding in business. The programs are structured to meet the needs of regional communities and are offered with the assistance and support of community organizations, at no or minimal cost to the participants. CWE serves women within the 11 counties surrounding Pittsburgh, PA.

Impact

Since receiving SBA Women's Business Center award in 2016 and with the support of community partners and economic development agencies, CWE has offered 214 training programs from April 2016 through September 2020, including Concept to Launch a 6-week entrepreneurial training program, Build Your Business workshop, webinars, and seminars on topics including financing a business, digital marketing, branding, accounting, exporting, certification, legal issues, hiring employees, veteran business ownership, and business startup, growth, and new product/service development. Through these programs, CWE has served over 5630 women entrepreneurs with 578 training hours.

CWE offers free business counseling and technical assistance to startup and established women entrepreneurs at our Chatham Eastside location, and multiple locations in Allegheny, Butler, Beaver and Westmorland counties. The business counseling and technical assistance is provided in person, online and by phone. From April 2016 to September 2020, CWE provided 2649 hours of business counseling to 1399 clients, which directly contributed to 164 new businesses and \$12.5M in raised capital through a combination of equity, SBA loans, and private loans. Since April 1, 2020, CWE has provided COVID-19 resource, recovery and loan counseling sessions to nearly 185 unique clients, resulting in over \$4.6M in capital infusion.

To visit the Center for Women's Entrepreneurship page, [click here](#).

Pennsylvania Center for Women and Politics

Mission: “To increase women’s influence and leadership in public life in Pennsylvania and improve the quality of women’s lives by providing them with educational and training opportunities in politics and public policy.”

The Pennsylvania Center for Women and Politics (PCWP) at Chatham University is a non-partisan center devoted to fostering women’s public leadership through education, empowerment, and action.

The first to focus on women’s political involvement in Pennsylvania, the Center integrates disciplinary knowledge, civic education, and coalition building while examining the intersection of women and public policy. The Center conducts candidate and advocacy trainings, offers educational programs in applied politics, and provides timely analysis on women’s issues. The Center is also home to the University’s membership in Project Pericles – a select group of liberal arts colleges and universities that have made institutional commitments to promoting participatory citizenship and social responsibility.

The Pennsylvania Center for Women, Politics, and Public Policy was established in 1998 through the generosity of the Hillman Foundation, Inc. and the Maurice Falk Medical Foundation. It was then reconceived and endowed in 2003, by the Hillman Foundation.

To visit the Pennsylvania Center for Women and Politics (PCWP) page, [click here](#).

Public Leadership Education Network (PLEN)

Chatham University is a founding member of [PLEN](#) (the Public Leadership Education Network), a coalition of women's colleges and universities that offers Washington DC-based seminars and internships*. The Center offers scholarships for Chatham students to attend PLEN Seminars throughout the year. PLEN Scholarships are awarded on a rolling basis. These trips are typically attended by pre-law students (Women, Law & Public Policy Seminar), science majors (Women & Science/Technology Policy Seminar), and for those with more general policy interests the Women and Congress or Women and International Policy seminars. Participants in PLEN seminars or internships have credit-earning opportunities. The Center coordinates applications to the PLEN program. Contact the PCWP at pcwp@chatham.edu for additional information about conference registration, credit, and financial assistance for participation.

To visit the Public Leadership Education Network page, [click here](#).

Office of Sustainability

Chatham University's Office of Sustainability coordinates with University departments, faculty, and student groups to take steps to a more sustainable living, learning, and working environment for the campus community.

To visit the Chatham University's Office of Sustainability, [click here](#).

Varsity Athletics

The Department of Athletics guides, encourages, and supports Chatham student-athletes in their pursuit of comprehensive excellence academically, athletically, and socially. Go Cougars!

For more information, [click here](#).

School of Arts, Science and Business

The School of Arts, Science & Business (SASB) at Chatham University is home to many undergraduate degrees and several thriving graduate programs. We are known for small, dynamic classes, one-on-one advising by expert faculty, flexibility, and a hands-on, open-door approach, because students come first at SASB. The School is proud to house more than 40 undergraduate majors and 13 graduate degrees.

For more information about The School of Arts, Science & Business, [click here](#).

School of Health Sciences

The highly-collaborative School of Health Sciences (SHS) at Chatham University stands in stark contrast to the “lost in the crowd” health sciences programs at many larger universities. The School's unique makeup allows for inter-professional education among students in athletic training, health informatics, nursing, occupational therapy, physical therapy, physician assistant studies and psychology.

For more information about The School of Health Sciences, [click here](#).

Falk School of Sustainability & Environment

One of the earliest schools of its kind in the country, the Falk School is a wellspring for leadership and education to overcome current and future sustainability challenges. The Falk School of Sustainability & Environment is inspired by the work of Chatham alumna Rachel Carson '29, whose knowledge about the environment and passion to preserve it are traits that drive the mission of the school. The academic programs in the Falk School are dedicated to producing professional sustainability leaders.

For more information about The Falk School, [click here](#).

School of Continuing & Professional Studies

Chatham University's School of Continuing and Professional Studies (SCPS) provides innovative online degree, certificate, and non-credit academic programs for working people of all skill and knowledge levels.

For more information about The School of Continuing and Professional Studies, [click here](#).

2022-2023 Course Catalog

Accounting (BA)

The Accounting major prepares students with not only technical accounting skills but also the critical thinking and communication skills necessary to succeed in the 21st century workplace. Chatham Accounting graduates are fully prepared to take advantage of diverse career opportunities including public accounting, industry or government.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of bachelor's-level programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Accounting graduates of bachelor's level programs will be able to:

- Develop an audit engagement work plan in a specified area (i.e., Revenue and Collection Cycle, Acquisition and Expenditure Cycle)
- Conduct an Internal Control Evaluation for Risk Assessment
- Demonstrate oral communication of findings to senior management/Board of Directors

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	<p>Financial Accounting Principles I</p> <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
ACT223	<p>Managerial Accounting Principles</p> <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS105	<p>Foundations of Business</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS110	<p>Business Statistics</p> <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS171	<p>Information Systems and Operations</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits
BUS230W	<p>Organizational Behavior</p> <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics	3 credits
	Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	
INTBUS303	Internship - Business	3 credits
	The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	
ACT490	Integrative Capstone	3 credits
	The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • BUS310W Business Analytics: Research Methods • BUS312W Marketing Research 	

Accounting Major

5 courses

4 required courses

ACT322	Intermediate Accounting I	3 credits
	This course engages the student in a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students will examine the nature, composition, valuation, and classification of balance sheet items.	
ACT323	Intermediate Accounting II	3 credits
	This course is a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of various liability and equity accounts. Students examine the nature, composition, valuation, and classification of these accounts as well as important financial reporting concepts, proper financial statement presentation, and related disclosures.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • ACT322 Intermediate Accounting I 	

ACT324	Individual Tax Accounting	3 credits
<p>The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organization (e.g., corporations, partnerships). The focus of the course is on developing knowledge of tax law and its application.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 		
ACT412	Auditing	3 credits
<p>The course engages the student in a study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • ACT323 Intermediate Accounting II 		
<p>1 approved Elective from the following:</p>		
ACT480	Accounting Information Systems	3 credits
<p>This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 		
CMP283	Database Management Systems	3 credits
<p>This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • CMP202 Introduction to Programming • CMP120 Introduction to Programming 		

Intradisciplinary Major in Two Business Disciplines

Students who wish to do an Intradisciplinary major in two business concentrations must complete the Business Core Major Requirements, plus the following courses.

ACT322	Intermediate Accounting I This course engages the student in a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students will examine the nature, composition, valuation, and classification of balance sheet items.	3 credits
ACT323	Intermediate Accounting II This course is a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of various liability and equity accounts. Students examine the nature, composition, valuation, and classification of these accounts as well as important financial reporting concepts, proper financial statement presentation, and related disclosures. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ACT322 Intermediate Accounting I	3 credits
ACT324	Individual Tax Accounting The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organization (e.g., corporations, partnerships). The focus of the course is on developing knowledge of tax law and its application. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ACT222 Financial Accounting Principles I	3 credits
ACT412	Auditing The course engages the student in a study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ACT323 Intermediate Accounting II	3 credits

Interdisciplinary Major in Accounting

Students who wish to do an interdisciplinary major in a business area (Accounting, Economics, International Business, Management, or Marketing) and a non-business discipline will complete the following courses: (10 courses, exclusive of Integrative Capstone)

ACT222	Financial Accounting Principles I	3 credits
	<p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	
ACT223	Managerial Accounting Principles	3 credits
	<p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	
ACT322	Intermediate Accounting I	3 credits
	<p>This course engages the student in a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students will examine the nature, composition, valuation, and classification of balance sheet items.</p>	
ACT323	Intermediate Accounting II	3 credits
	<p>This course is a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of various liability and equity accounts. Students examine the nature, composition, valuation, and classification of these accounts as well as important financial reporting concepts, proper financial statement presentation, and related disclosures.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT322 Intermediate Accounting I 	
ACT324	Individual Tax Accounting	3 credits
	<p>The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organization (e.g., corporations, partnerships). The focus of the course is on developing knowledge of tax law and its application.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	
ACT412	Auditing	3 credits
	<p>The course engages the student in a study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.</p> <p>Pre-requisites Complete the following course:</p>	

- ACT323 Intermediate Accounting II

BUS110	Business Statistics	3 credits
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This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

BUS257	Business Law and Business Ethics	3 credits
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This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.

BUS310W	Business Research and Analytics	3 credits
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This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
- MTH110 Elementary Statistics
- PSY213 Statistics and Research Design

OR

Prerequisite course for Capstone (xxx490) in the other discipline

1 Approved Accounting or Business elective

ACT480	Accounting Information Systems	3 credits
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This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.

Pre-requisites Complete the following course:

- ACT222 Financial Accounting Principles I

CMP283	Database Management Systems	3 credits
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This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

Minor Requirements

6 courses, including:

ACT222	Financial Accounting Principles I	3 credits
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This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).

ACT223	Managerial Accounting Principles	3 credits
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This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.

Pre-requisites Complete the following course:

- ACT222 Financial Accounting Principles I

ACT322	Intermediate Accounting I	3 credits
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This course engages the student in a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students will examine the nature, composition, valuation, and classification of balance sheet items.

ACT323	Intermediate Accounting II	3 credits
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This course is a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of various liability and equity accounts. Students examine the nature, composition, valuation, and classification of these accounts as well as important financial reporting concepts, proper financial statement presentation, and related disclosures.

Pre-requisites Complete the following course:

- ACT322 Intermediate Accounting I

ACT324 Individual Tax Accounting

3 credits

The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organization (e.g., corporations, partnerships). The focus of the course is on developing knowledge of tax law and its application.

Pre-requisites Complete the following course:

- ACT222 Financial Accounting Principles I

ACT412 Auditing

3 credits

The course engages the student in a study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.

Pre-requisites Complete the following course:

- ACT323 Intermediate Accounting II

OR

ACT480 Accounting Information Systems

3 credits

This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.

Pre-requisites Complete the following course:

- ACT222 Financial Accounting Principles I

Applied Data Science Analytics (BS)

The Applied Data Science Analytics curriculum allows students to develop theoretical understanding of data analytics and translate theory into practice through hands-on applications. Students can benefit from innovative courses such as [Digital Marketing](#) (BUS496), which engages students in the analytics of online advertising and promotion data, and [Careers for the Digital Age](#) (IND250), which explores computing and digital skills essential to professionals in the 21st century.

Students can also choose a minor in a specialized field, such as a business field, [political science](#), [sustainability](#), [biology](#), [psychology](#), [mathematics](#), or more.

Learning Outcomes

At the completion of the program, students will be able to:

1. Create effective mathematical solutions to analytical problems.
2. Create effective solutions to computing challenges in analytical projects.
3. Effectively organize and manage datasets for analytical projects.
4. Critically analyze problems and identify analytical solutions.
5. Communicate analytics problems, methods, and findings effectively orally, visually, and in writing.
6. Critically evaluate ethical, privacy and security challenges in data analytics.

Curriculum

Major Requirements

BUS171	Information Systems and Operations This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.	3 credits
BUS310W	Business Research and Analytics This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations. Pre-requisites Complete any 1 of the following courses:	3 credits

- BUS110 Business Statistics
- MTH110 Elementary Statistics
- PSY213 Statistics and Research Design

BUS421	Information and Cybersecurity This course introduces fundamental issues in information and cybersecurity, with an emphasis on vulnerabilities available to cyber attackers. Students develop conceptual tools for identifying vulnerabilities, assessing threats, analyzing risk, and selecting controls to mitigate risk, and practical skills in implementing security, responding to incidents, and designing systems that prevent cyberattacks. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • BUS171 Information Systems and Operations 	3 credits
CMP120	Introduction to Programming An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.	3 credits
CMP283	Database Management Systems This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CMP202 Introduction to Programming • CMP120 Introduction to Programming 	3 credits
DSA250	Fundamentals of Data Science In this course students learn the fundamentals of the data science process, including data acquisition, data cleaning and manipulation to prepare for analysis, common machine learning models for classification and regression, unsupervised machine learning models, and principles of model evaluation. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • CMP120 Introduction to Programming • MTH110 Elementary Statistics 	3 credits
DSA400W	Data Visualization and Communication Cover the different ways of visualizing data, given different types and characteristics of data. Includes assessment and evaluation of existing data visualization techniques. Current tools used transform data and visualize data are reviewed, including Python, Google Charts, and/or Tableau. Pre-requisites Complete all 2 of the following courses:	3 credits

- CMP120 Introduction to Programming
- DSA250 Fundamentals of Data Science

DSA411	Machine Learning and AI	3 credits
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An introduction to machine learning and artificial intelligence. Topics include classification, regression, clustering, planning, and scheduling. Includes current issues relevant to big data problems.

Pre-requisites Complete the following course:

- DSA250 Fundamentals of Data Science
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INTDSA303	Internship - Data Science Analytics	3 credits
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Internship - Data Science Analytics

MTH110	Elementary Statistics	3 credits
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Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.

OR

BUS110	Business Statistics	3 credits
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This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business
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MTH151	Calculus I	4 credits
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This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.

MTH152	<p>Calculus II</p> <p>This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
MTH221	<p>Linear Algebra</p> <p>Topics include finite dimensional vector spaces, geometry of \mathbb{R}^n, linear functions, systems of linear equations, and theory of matrices and determinants.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	3 credits
MTH222	<p>Multivariate and Vector Calculus</p> <p>An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
MTH244	<p>Discrete Mathematics</p> <p>This course is an introduction to the fundamental logic and mathematical concepts of discrete quantities, as employed in digital computers. Emphasis will be on the careful and precise expression of ideas. Topics include sets and logic, relations and functions, proof techniques, algorithms, combinatorics, discrete probability, graphs, and trees. Three hours of class per week.</p>	3 credits
MTH310	<p>Probability</p> <p>An introduction to the theory of probability and the role of proofs in mathematics. Topics include discrete and continuous probability functions, random variables, expectations, moments, moment generating functions, the central limit theorem, and Chebyshev's inequality. Applications of probability such as queuing theory, Markov processes, and reliability theory also will be covered. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
DSA490	<p>Integrative Capstone</p> <p>The integrative capstone is an extended project centered on a major; projects may include laboratory or fieldwork, creative work in the arts, advocacy work, or independent research; projects may be conducted in a group setting. Integrative capstones in the interdisciplinary major must be approved by both academic programs.</p> <p>Pre-requisites Complete all 2 of the following courses:</p>	3 credits

- BUS310W Business Analytics: Research Methods
- DSA250 Fundamentals of Data Science

Nine (9) credits of approved electives: choose from list below or get Program Director approval. Only one MTH course permitted.

ART261	Web Design 1: Code + Aesthetics	3 credits
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This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- FDT210 Studio: Adobe Illustrator
- FDT220 Studio: Adobe Photoshop

BUS317	Systems Analysis and Design	3 credits
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This course introduces information systems analysis and design for contemporary organizations, with a focus on developing critical skills in communicating with people as users, analyzing processes, translating needs into information systems requirements, and testing of prototype ideas. Topics also include functional, structural, and behavioral modeling, and Unified Modeling Language (UML).

Pre-requisites Complete the following course:

- CMP283 Database Management Systems

BUS416	Computer Networking & Telecommunication	3 credits
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This course introduces students to the foundational network technologies for data encoding and transmission. Topics may include telephone network and internet architecture, communication protocols (e.g., HTTP, SMTP), transport protocols (e.g., UDP, TCP), and network protocols (IP), TCP/IP, LANs, WANs, circuit vs. packet switching, network security, and multimedia.

Pre-requisites Complete the following course:

- BUS171 Information Systems and Operations

BUS450	Advanced Database	3 credits
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This course examines advanced topics of database management, including system architecture, complex database objects, building database applications, designing data warehouses, and creating database infrastructure to support Big Data analytics. Students gain hands-on experience through the implementation of database systems, including storage management, query processing, transaction management, and security management.

Pre-requisites Complete the following course:

- CMP283 Database Management Systems

CMP220	<p>Computer Programming II</p> <p>In this course students learn to develop computer programs using a modern object-oriented language such as java, python, or C#. Topics covered include user-defined classes, inheritance, polymorphism, data structures such as linked lists, stacks, queues, and trees, sorting and searching algorithms, recursion, event-driven programming and exceptions.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CMP120 Introduction to Programming 	3 credits
DSA200	<p>Data Science Ethics</p> <p>In this course students learn about data science methods from a non-technical perspective and discuss cases that highlight ethical issues related to data science models, including inherent biases learned from training data, discrimination through proxy variables, lack of transparency, and issues related to privacy and data ownership.</p>	3 credits
MTH215W	<p>Introduction to Proof</p> <p>This course introduces students to the process of reading, understanding and writing rigorous mathematical arguments. Additionally, students will become familiar with computer software used for analyzing math problems and typesetting mathematical documents. This course is a pre-requisite for many upper-level math courses and is intended to help students transition from problem-solving oriented classes such as Calculus into courses focused on understanding and writing proofs. Topics include: basic logic, introductory set theory, functions and relations, and quantifiers.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH151 Calculus I • MTH152 Calculus II 	4 credits
MTH241	<p>Differential Equations</p> <p>Introduction to differential equations. Topics include first-order and linear equations, systems of equations, series solutions, and Laplace transform methods with computer-aided study of numerical solutions, and introduction to partial differential equations, and Fourier series. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
MTH256	<p>The History and Theory of Numbers</p> <p>A survey of the history of our number system and theory of numbers. Topics covered include the development of number systems and mathematics from before the sixth century to the present, divisibility, factorization, arithmetic functions, quadratic reciprocity, primitive roots, and diophantine equations. Three hours of class per week.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH105 College Algebra • MTH106 Trigonometry OR Complete the following course: • MTH108 Precalculus 	3 credits

- OR Complete the following course:
- MTH151 Calculus I

MTH327	<p>Advanced Analysis</p> <p>Foundations for abstract analysis, real and complex number systems, elements of point set topology and limits, continuity, and derivatives.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH222 Multivariate and Vector Calculus • MTH215W Introduction to Proof 	3 credits
PHI121	<p>Introduction to Logic</p> <p>An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.</p>	3 credits
SUS404	<p>Quantitative Ecology</p> <p>Drawing from case studies in landscape design and natural resource management, this course will apply quantitative methods to ecological data analysis. Students will work with the software program R to apply statistical inference and mathematical modeling using previously collected data sets on single species, species interactions, communities, and food webs.</p>	3 credits

Interdisciplinary Major in Applied Data Science Analytics

BUS105	<p>Foundations of Business</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS171	<p>Information Systems and Operations</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits

BUS310W Business Research and Analytics 3 credits

This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
- MTH110 Elementary Statistics
- PSY213 Statistics and Research Design

OR

Prerequisite course for Capstone (xxx490) in the other discipline

CMP120 Introduction to Programming 3 credits

An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.

CMP283 Database Management Systems 3 credits

This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

DSA411 Machine Learning and AI 3 credits

An introduction to machine learning and artificial intelligence. Topics include classification, regression, clustering, planning, and scheduling. Includes current issues relevant to big data problems.

Pre-requisites Complete the following course:

- DSA250 Fundamentals of Data Science
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MTH110	Elementary Statistics	3 credits
	<p>Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.</p>	

OR

BUS110	Business Statistics	3 credits
	<p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p>	

Pre-requisites Complete the following course:

- BUS105 Foundations of Business
-

MTH151	Calculus I	4 credits
	<p>This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.</p>	

MTH152	Calculus II	4 credits
	<p>This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.</p>	

Pre-requisites Complete the following course:

- MTH151 Calculus I
-

MTH221	Linear Algebra	3 credits
	<p>Topics include finite dimensional vector spaces, geometry of \mathbb{R}^n, linear functions, systems of linear equations, and theory of matrices and determinants.</p>	

Pre-requisites Complete the following course:

- MTH151 Calculus I
-

MTH222	Multivariate and Vector Calculus	3 credits
	<p>An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.</p>	

Pre-requisites Complete the following course:

- MTH152 Calculus II

PHI121	Introduction to Logic An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.	3 credits
DSA250	Fundamentals of Data Science In this course students learn the fundamentals of the data science process, including data acquisition, data cleaning and manipulation to prepare for analysis, common machine learning models for classification and regression, unsupervised machine learning models, and principles of model evaluation. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • CMP120 Introduction to Programming • MTH110 Elementary Statistics 	3 credits

Minor Requirements

18 credits

BUS171	Information Systems and Operations This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.	3 credits
CMP120	Introduction to Programming An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.	3 credits
CMP283	Database Management Systems This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CMP202 Introduction to Programming • CMP120 Introduction to Programming 	3 credits

DSA250 **Fundamentals of Data Science** **3 credits**

In this course students learn the fundamentals of the data science process, including data acquisition, data cleaning and manipulation to prepare for analysis, common machine learning models for classification and regression, unsupervised machine learning models, and principles of model evaluation.

Pre-requisites Complete all 2 of the following courses:

- CMP120 Introduction to Programming
- MTH110 Elementary Statistics

DSA400W **Data Visualization and Communication** **3 credits**

Cover the different ways of visualizing data, given different types and characteristics of data. Includes assessment and evaluation of existing data visualization techniques. Current tools used transform data and visualize data are reviewed, including Python, Google Charts, and/or Tableau.

Pre-requisites Complete all 2 of the following courses:

- CMP120 Introduction to Programming
- DSA250 Fundamentals of Data Science

MTH110 **Elementary Statistics** **3 credits**

Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.

OR

BUS110 **Business Statistics** **3 credits**

This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

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Arts Management (BA)

The arts management major is an interdisciplinary program, combining courses from business and the arts. The major is designed specifically to prepare students for leadership roles through expertise in strategic planning, management, marketing and artistic planning. Students will ascribe meaning to the visual elements, in all their guises and combinations, recognize historic styles, and the cultural forces that shaped them. Students will also identify business opportunities within the art world and focus on planning, organizing, leading, and controlling the use of resources to accomplish performance goals in art organizations.

Learning Outcomes

College-Wide Goals & Objectives

This section explains how the Arts Management Major meets the overarching objectives at Chatham University.

1. Information Literacy

- a. Students must effectively locate and gather information for research and media-related and management analysis through a variety of information media.
- b. Students must be able to properly evaluate the quality of the information and its sources.
- c. Students must utilize their knowledge gathered from various media and management sources to render well-communicated, designed and conceptualized projects and/or research papers in response to their contextual analysis.

2. Critical Reading

- a. Students must evaluate theories related to critical visual studies and management through a combination of written and online texts, hand-outs, journal articles, and in-class lectures, conversations and demonstrations.
- b. Students must assess the quality of gathered and presented information as well as its sources.

3. Analytical Thinking

- a. Students must critically investigate and respond to the work of other media artists, art historians, filmmakers, musicians and business theorists as well as the work of their peers during critique sessions.
- b. Students must look for multidisciplinary relationships between arts, management and other fields of research, examining the role of the artist/musician/art historian and manager within a broader social context.
- c. Students must exhibit a critical understanding of related technical concerns, representational issues, aesthetic practices, management ideas and concepts through original projects and/or papers.

4. Problem Solving

- a. Students must transform critical and analytical research into well-conceptualized projects and informed responses.
- b. Students must be able to move from concept to project actualization.
- c. Students must have a strong understanding of technique, the technical and critical thinking in order to properly troubleshoot and solve issues related to a project.

5. Public Written Communication

- a. Students must communicate clearly by writing research or response papers of various lengths, which support coursework requirements.
- b. Students must communicate their conceptual and creative concepts clearly in written project statements.
- c. Students must formulate a point of view and be able to defend it within the written format.

6. Public Oral Communication

- a. Students must communicate ideas clearly in oral presentations.
- b. Students must actively participate in classroom discussions and group critique sessions.
- c. Students must formulate a point of view and be able to defend it orally.

Program-Specific Goals & Objectives

This section explains the discipline-specific goals and objectives of the Bachelor of Arts in the Arts Management program.

1. Content

- a. Ascribe meaning to the visual elements, in all their guises and combinations.
- b. Describe the inherent properties of the principal artistic media.
- c. Recognize historic styles, their sequence, and the cultural forces that shaped them.
- d. Identify business opportunities within the art world.
- e. Plan, organize, lead, and control the use of resources to accomplish performance goals in organizations.
- f. Apply principles of group and individual dynamics through effective membership in a team + Leadership.
- g. Identify issues and problems in human resource management and develop a human resource management plan.

2. Critical Thinking

- a. Students must critically analyze works of art or written materials within the contemporary discourse of the sub-disciplines: studio art, art history, music, media arts and management.
- b. Students must develop a personal conceptual framework for evaluating the relevance of a work, whether visual, aural or verbal, to its larger cultural, social, or historic context.
- c. Students must conduct research by selecting and managing both traditional and non-traditional resources to inform decisions.
- d. Students must identify business problems, frameworks for their solution and use appropriate

problem solving techniques for business problems.

3. Communication

- a. Students must convey a complex idea effectively through visual means.
- b. Students must verbally communicate a complex idea in spoken or written form.
- c. Students must employ professional communication conventions, when it is appropriate to do so.
- d. Students must communicate effectively in writing, create and deliver effective oral presentations, and contribute effectively to group discussions.

4. Integrity/Values

- a. Students must treat shared tools, work areas, exhibit spaces, and other resources with respect.
- b. Students must evaluate the work and opinions of fellow students with honesty and respect.
- c. Students must exercise academic integrity in all forms.
- d. Students must articulate ethical issues that occur in business, evaluate alternative courses of action, and evaluate the implications of those actions.

5. Program Management

- a. Students must produce a cohesive body of work built upon sound professional practices in the field of choice: studio art, music, media arts, art history, and business management.
- b. Students must develop and execute projects that take into account resources and timetables.
- c. Students must collaborate with peers or professionals, whenever required for the successful completion of a project.
- d. Students must plan projects, work in team settings, and deliver project outcomes on time.
- e. Students must add diversity and understand the global context of Arts Management.

Curriculum

Major Requirements

12 courses, including

BUS105	Foundations of Business This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	3 credits
ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits

MTH110	Elementary Statistics	3 credits
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Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.

OR

BUS110	Business Statistics	3 credits
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This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

ACT222	Financial Accounting Principles I	3 credits
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This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).

BUS243W	Principles of Marketing	3 credits
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This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

BUS452	Managing Nonprofit Organizations	3 credits
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Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

Complete all 2 of the following courses:

- SWK102 Introduction to Social Work, Social Justice and Social Issues
- SWK101 Introduction to Sociology

ART490 Integrative Capstone 3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

BUS310W Business Research and Analytics 3 credits

This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
- MTH110 Elementary Statistics
- PSY213 Statistics and Research Design

OR

FDT300W Critical Theory 3 credits

Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.

Six approved courses from one of the following programs: Visual Arts, Media Arts or Music or Dance* - Courses must be approved by advisor and Department Chair

*The Dance concentration is a collaborative program with the Pittsburgh Ballet Theater, PBT, those course are taken at PBT.

Note: For those students not applying for the CMU program one additional course needs to be taken in the art field selected by the student in consultation with their Advisor and approved by the Department Chair.

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Biochemistry (BA/BS)

Biochemistry is a science whose boundaries now encompass many aspects of chemistry and biology, from molecules and cells to organisms and ecology. Scientists use the tools of biochemistry and molecular biology to explore cures for disease, improve public health, remediate environmental pollution, and develop cheaper and safer natural products. The program is approved by the American Chemical Society and is ideal for students who are planning graduate work in biochemistry or molecular biology, seeking jobs in biotechnology, or applying to medical school.

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Write well on exams, short paper, long papers and laboratory reports.
- Make oral reports of varying lengths, either alone or as part of a team.
- Prepare and present posters at scientific meetings.
- Exhibit critical thinking when reading texts, lecture supplements, and other materials.
- Prepare a literature review and a bibliography on a topic in chemistry.
- Obtain relevant information from primary sources in a library or online.
- Demonstrate knowledge about the broad core of chemistry.
- Recognize and use connections of chemistry to biology, computing, and mathematics.
- Use ethical scientific methods in obtaining and evaluating data.
- Demonstrate proper methods in the design and conduct of research.
- Exhibit basic laboratory skills in such areas as preparing solutions and titration.
- Use chemical instrumentation and perform both qualitative and quantitative analyses.
- Be able to use computer hardware and software for chemical purposes.
- Demonstrate safety in the laboratory.
- Make proper disposal of wastes.

Curriculum

Major Requirements (BA)

43 Credits of Required Courses and Restricted Electives

BIO144

The Organism

3 credits

This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.

BIO144L	<p>Lab: The Organism</p> <p>Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.</p>	1 credits
BIO231	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II 	3 credits
CHM107	<p>Chemistry I</p> <p>This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109</p>	3 credits
CHM108	<p>Chemistry II</p> <p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM105 General Chemistry • CHM107 Chemistry I 	3 credits
CHM205	<p>Organic Chemistry I</p> <p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 	3 credits
CHM206	<p>Organic Chemistry II</p> <p>Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term.</p>	3 credits

Pre-requisites Complete all 2 of the following courses:

- CHM205 Organic Chemistry I
- CHM215L Elementary Organic Laboratory

CHM338 Biochemistry I 3 credits

This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.

Pre-requisites Complete the following course:

- CHM205 Organic Chemistry I

CHM339 Biochemistry II 3 credits

Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438

Pre-requisites Complete all 2 of the following courses:

- CHM206 Organic Chemistry II
- CHM338 Biochemistry I

CHM340L Macromolecule Laboratory 2 credits

An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO. Additional Fee(s): Laboratory fee.

Pre-requisites Complete the following course:

- CHM338 Biochemistry I

CHM490 Integrative Capstone 3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- IND350 Scientific Research Methods

IND200W	Introduction to Scientific Research	2 credits
	<p>This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	
IND350	Scientific Research Methods	2 credits
	<p>This course serves as an introduction to research literature and research methodology in the sciences. Students prepare a research proposal including literature review, experimental design and methods, budget, timetable, and bibliography. Other topics include professional presentation techniques and research ethics. The student's major department must approve proposals prior to the Tutorial.</p>	
One Elective From Listed Below:		
CHM209	Inorganic Chemistry	3 credits
	<p>A descriptive survey of inorganic chemistry, including bonding theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 	
CHM311	Physical Chemistry I	3 credits
	<p>Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 	
CHM312	Physical Chemistry II	4 credits
	<p>Quantum mechanics, spectroscopy, introduction to symmetry, and introduction to statistical mechanics. Four hour lectures per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM311 Physical Chemistry I 	
CHM322	Topics in Analytical Chemistry	3 credits
	<p>This course explores the fundamental chemical principles underlying modern chemical instrumentation. Students learn the advantages and limitations of these instruments, how to select the proper instrumental configuration for a specific experiment, and how to evaluate emerging chemical technologies. Three hours of lecture per week. Corequisite:</p>	

CHM 318

Pre-requisites Complete the following course:

- CHM215L Elementary Organic Laboratory

Co-requisites

- CHM318L Chemical Analysis Laboratory

CHM343	Environmental Chemistry	3 credits
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This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Cross-listed as ENV 443. Three hour lecture per week.

Pre-requisites Complete any 1 of the following courses:

- CHM205 Organic Chemistry I
- CHM206 Organic Chemistry II
- CHM209 Inorganic Chemistry
- CHM215L Elementary Organic Laboratory
- CHM216L Organic Chemistry Laboratory

CHM493	Independent Study	3 credits
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Independent Study

Pre-requisites Complete the following course:

- XXX123 Permission of Instructor

Major Requirements (BS)

68 Credits of Required Courses and Restricted Electives

BIO144	The Organism	3 credits
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This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.

BIO144L	Lab: The Organism	1 credits
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Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.

BIO221	<p>General Microbiology</p> <p>The study of fundamental characteristics of bacteria and related microorganisms, including taxonomy, physiology, and distribution. Three class meetings per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism • CHM108 Chemistry II 	3 credits
OR		
BIO417	<p>Genetics</p> <p>This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO231W Cell and Molecular Biology • CHM205 Organic Chemistry I • MTH110 Elementary Statistics 	3 credits

BIO231	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II 	3 credits
CHM107	<p>Chemistry I</p> <p>This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109</p>	3 credits
CHM108	<p>Chemistry II</p> <p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p>	3 credits

- CHM105 General Chemistry
- CHM107 Chemistry I

CHM109L	<p>Chemistry I Laboratory</p> <p>Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with the lectures in Chemistry 105 and Chemistry 107. Three hours of laboratory per week. Corequisite: CHM 105 or 107. Additional Fee(s): Laboratory fee.</p>	1 credits
CHM110L	<p>Chemistry II Laboratory</p> <p>Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.</p>	1 credits
CHM205	<p>Organic Chemistry I</p> <p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 	3 credits
CHM206	<p>Organic Chemistry II</p> <p>Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I • CHM215L Elementary Organic Laboratory 	3 credits
CHM215L	<p>Elementary Organic Laboratory</p> <p>Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	2 credits
CHM216LW	<p>Organic Chemistry Laboratory</p> <p>Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory 	2 credits

CHM311	<p>Physical Chemistry I</p> <p>Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 	3 credits
CHM317L	<p>Integrated Chemistry Laboratory</p> <p>Experiments are selected to illustrate important principles of advanced experimental chemistry and familiarize students with important experimental methods. The course is intended to encourage students to think critically about the reliability of their experimental results in the light of their previous chemistry experience. Five hours of laboratory per week.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • CHM311 Physical Chemistry I 	2 credits
CHM318L	<p>Chemical Analysis Laboratory</p> <p>This laboratory teaches the proper design, implementation and analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Seven hours of laboratory per week. Cross-listed as BIO418. Additional Fee(s): Laboratory fee.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM216L Organic Chemistry Laboratory 	3 credits
CHM322	<p>Topics in Analytical Chemistry</p> <p>This course explores the fundamental chemical principles underlying modern chemical instrumentation. Students learn the advantages and limitations of these instruments, how to select the proper instrumental configuration for a specific experiment, and how to evaluate emerging chemical technologies. Three hours of lecture per week. Corequisite: CHM 318</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory <p>Co-requisites</p> <ul style="list-style-type: none"> • CHM318L Chemical Analysis Laboratory 	3 credits
CHM338	<p>Biochemistry I</p> <p>This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p>	3 credits

- CHM205 Organic Chemistry I

CHM339	Biochemistry II	3 credits
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Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438

Pre-requisites Complete all 2 of the following courses:

- CHM206 Organic Chemistry II
- CHM338 Biochemistry I

CHM340L	Macromolecule Laboratory	2 credits
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An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO. Additional Fee(s): Laboratory fee.

Pre-requisites Complete the following course:

- CHM338 Biochemistry I

CHM490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- IND350 Scientific Research Methods

IND200W	Introduction to Scientific Research	2 credits
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This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.

Pre-requisites Complete the following course:

- ENG105 First-Year Writing

IND350W	<p>Scientific Research Methods</p> <p>This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.</p>	2 credits
MTH152	<p>Calculus II</p> <p>This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
PHY251	<p>Principles of Physics I</p> <p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
PHY252	<p>Principles of Physics II</p> <p>Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PHY251 Principles of Physics I 	4 credits
PHY255L	<p>Physics Laboratory I</p> <p>Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	1 credits
PHY256L	<p>Physics Laboratory II</p> <p>Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.</p>	1 credits

2022-2023 Course Catalog

Biology (BA/BS)

Biology includes the study of the structure, function, and interactions of living organisms at multiple levels; it is a field that is evolving rapidly. This major provides students with a broad interdisciplinary base in scientific knowledge combined with an in-depth exploration of a preferred area of interest. The B.A. degree is appropriate for students who want to demonstrate their capability in biology, but also want to explore related areas like teaching.

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Write well on exams, short paper, long papers and laboratory reports.
- Make oral reports of varying lengths, either alone or as part of a team.
- Prepare and present posters at scientific meetings.
- Exhibit critical thinking when reading texts, lecture supplements, and other materials.
- Prepare a literature review and a bibliography on a topic in biology.
- Obtain relevant information from primary sources in a library or online.
- Demonstrate knowledge about the broad core of biology.
- Recognize and use connections of biology to chemistry, computing, mathematics and statistics.
- Use ethical scientific methods in obtaining and evaluating data.
- Demonstrate proper methods in the design and conduct of research.
- Use microscopes, balances and other basic biological equipment.
- Prepare solutions and dilution series.
- Perform dissections and organism identification.
- Demonstrate safety in the laboratory.
- Make proper disposal of wastes.

Learning Outcomes Matrix [PDF]

[» Click here to view more detailed learning outcomes listings for each course.](#)

Chatham University Biology

Buhl Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements (BA and BS Degrees)

All biology majors must complete IND 350, BIO 498 and 499, and at least two biology courses with a laboratory component at Chatham University.

Major Requirements (BA)

17 courses, including:

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits
BIO144	The Organism This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.	3 credits
BIO144L	Lab: The Organism Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.	1 credits
CHM108	Chemistry II The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• CHM105 General Chemistry• CHM107 Chemistry I	3 credits
CHM110L	Chemistry II Laboratory Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.	1 credits

IND200W	Introduction to Scientific Research	2 credits
<p>This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 		

IND350W	Scientific Research Methods	2 credits
<p>This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.</p>		

BIO490	Integrative Capstone	3 credits
<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IND350W Scientific Research Methods 		

Choose 1 200-level elective with a lab - see elective pool below

BIO2XX - Biology Elective

BIO2XXL - Biology Elective Lab

Choose 1 200-level without a Lab - see elective pool below

BIO2XX

Choose 1 300-400-level elective with a Lab - see elective pool below

BIO3XX or BIO4XX - Biology Elective

BIO3XXL or BIO4XXL - Biology Elective Lab

BIO200-level electives:

BIO201	Anatomy	3 credits
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This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

BIO209	Basic Neuroscience	3 credits
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This course is designed for wide appeal. It is an introduction to structure and function of the brain and spinal cord, and how nerves function and communicate. The basics of movement, sensation, language, emotion, and consciousness are discussed. Emphasis is placed on contrasting normal function with altered function in diseases. Three hours lecture per week.

Pre-requisites Complete all 3 of the following courses:

- BIO143 The Cell
- BIO144 The Organism
- CHM108 Chemistry II

BIO217	Human Genetics	3 credits
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This course covers the underlying basis of genetic disorders. A foundation of basic genetic concepts such as Mendelian genetics and exceptions to Mendel's laws, chromosomal inheritance, and molecular genetics are taught and applied to the following advanced topics: epigenetics, medical genetics, cancer, biotechnology, population genetics, and evolutionary genetics.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

BIO218	Women's Health Issues	3 credits
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This course examines the biology of women, both cis gender and people within trans communities, providing a framework for the discussion of health issues, current research, treatments, and historical perspectives. Aspects of reproductive life and an examination of psychological, sociological and cultural influence.

BIO221	<p>General Microbiology</p> <p>The study of fundamental characteristics of bacteria and related microorganisms, including taxonomy, physiology, and distribution. Three class meetings per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism • CHM108 Chemistry II 	3 credits
BIO231	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II 	3 credits
BIO231W	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II • BIO144 The Organism 	3 credits
BIO224	<p>Botany</p> <p>An introduction to the structure and function of plants. Topics include the evolutionary rise of green plants, plant life cycles and development, plant physiology, plant ecology, and the morphology and taxonomy of vascular plants. The importance of plants for humans is discussed, including their use for food and medicine. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism 	3 credits
BIO248	<p>Ecology</p> <p>A study of the interrelation between organisms and their environment. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO144 The Organism • BIO143 The Cell <p>Complete the following course:</p>	3 credits

- SUS201 Integrative Biology

*or additional course pre-approved by the Department Chair

BIO200 or above lab electives:

BIO201L	Lab: Anatomy	2 credits
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Laboratory experiments emphasizing comparative anatomy between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

BIO302L	Physiology Lab	2 credits
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Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.

Pre-requisites Complete the following course:

- BIO201L Lab: Anatomy

BIO221L	Lab: General Microbiology	2 credits
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Experiments to complement the material in BIO221. Four hours of laboratory per week. Corequisite: BIO221. Additional Fee(s): Laboratory fees.

Co-requisites

- BIO221 General Microbiology

BIO224	Botany	3 credits
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An introduction to the structure and function of plants. Topics include the evolutionary rise of green plants, plant life cycles and development, plant physiology, plant ecology, and the morphology and taxonomy of vascular plants. The importance of plants for humans is discussed, including their use for food and medicine. Three hours of lecture per week.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

BIO209LW	Basic Neuroscience Lab	2 credits
Experiments and skills to compliment the material presented in BIO209. The lab course focuses on experimental procedures, scientific analysis and scientific writing. Three hours of laboratory per week. Laboratory Fee. Corequisite: BIO 209.		

BIO248LW	Lab: Ecology	2 credits
Experiments to complement the material presented in BIO248. Four hours of laboratory or field experience per week. Corequisite: BIO248. Additional Fee (s): Laboratory fee.		

*or additional course pre-approved by the Department Chair

BIO WI lab electives:

BIO209LW	Basic Neuroscience Lab	2 credits
Experiments and skills to compliment the material presented in BIO209. The lab course focuses on experimental procedures, scientific analysis and scientific writing. Three hours of laboratory per week. Laboratory Fee. Corequisite: BIO 209.		

BIO221LW	Lab: General Microbiology	2 credits
Experiments to complement the material in BIO221. Four hours of laboratory per week. Additional Fee(s): Laboratory fees.		
Co-requisites		
<ul style="list-style-type: none"> • BIO221 General Microbiology • BIO303 Applied and Environmental Microbiology 		

BIO248LW	Lab: Ecology	2 credits
Experiments to complement the material presented in BIO248. Four hours of laboratory or field experience per week. Corequisite: BIO248. Additional Fee (s): Laboratory fee.		

BIO303LW	Applied and Environmental Microbiology Lab	2 credits
This course will focus on modern laboratory techniques for the identification, purification, and cultivation of microorganisms at the bench; combined with microbial genomics and applied bioinformatic analyses through participation in authentic scientific research.		
Co-requisites		
<ul style="list-style-type: none"> • BIO303 Applied and Environmental Microbiology 		

*or additional course pre-approved by the Department Chair

BIO300-400-level electives:

BIO302	Physiology	3 credits
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This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.

Pre-requisites Complete the following course:

- BIO201 Anatomy

BIO303	Applied and Environmental Microbiology	3 credits
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This course will focus on the importance of microorganisms in environmental and industrial processes, and the role of scientific research in finding solutions to applied problems. Areas that will be covered include basic microbiology, soil and water microbiology, agricultural and food microbiology, and public health microbiology.

BIO319	Experimental Neuroscience	3 credits
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With an emphasis on neuropathology, the course builds on the foundations of neuroscience to explore advanced topics in sensation, motor control, emotion, and cognition. Classical and modern methods for investigating the structure and function of the nervous system will be examined through lectures, discussions, and student projects.

Pre-requisites Complete the following course:

- BIO209 Basic Neuroscience
Complete any 1 of the following courses:
- BIO231 Cell and Molecular Biology
- BIO231W Cell and Molecular Biology

BIO408	Developmental Biology	3 credits
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A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.

Pre-requisites Complete any 1 of the following courses:

- BIO231 Cell and Molecular Biology
- BIO231W Cell and Molecular Biology

BIO417	<p>Genetics</p> <p>This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO231W Cell and Molecular Biology • CHM205 Organic Chemistry I • MTH110 Elementary Statistics 	3 credits
BIO419	<p>Immunology</p> <p>This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week. Prerequisite(s): BIO221 or BIO302</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO221 General Microbiology 	3 credits
BIO458	<p>Histology</p> <p>A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from text book, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 Anatomy 	3 credits
BIO484	<p>Plant Physiology</p> <p>This course is an introduction to the physiology and biochemistry of plants. Lectures and laboratory exercises cover plant cells, enzymes, transport of water and nutrients, metabolism, defenses against pathogens, gene expression, hormones, and responses to environmental stimuli. Three lectures per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • BIO224 Botany 	3 credits
CHM338	<p>Biochemistry I</p> <p>This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I 	3 credits

CHM339	Biochemistry II	3 credits
<p>Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM206 Organic Chemistry II • CHM338 Biochemistry I 		

*or additional course pre-approved by the Department Chair

BIO300-400-level lab electives:

BIO302L	Physiology Lab	2 credits
<p>Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201L Lab: Anatomy 		

BIO303LW	Applied and Environmental Microbiology Lab	2 credits
<p>This course will focus on modern laboratory techniques for the identification, purification, and cultivation of microorganisms at the bench; combined with microbial genomics and applied bioinformatic analyses through participation in authentic scientific research.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • BIO303 Applied and Environmental Microbiology 		

BIO440L	Macromolecule Laboratory	2 credits
<p>An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as CHM340.</p>		

BIO484L	Lab: Plant Physiology	2 credits
Experiments to complement the material presented in BIO384. Four hours of laboratory per week. Corequisite: BIO484. Additional Fee(s): Laboratory fees.		
Co-requisites		
<ul style="list-style-type: none"> • BIO484 Plant Physiology 		

Major Requirements (BS)

All B.S. biology majors must complete the set of core courses in addition to the courses in one of the three available concentration areas listed below.

Core of 13 courses, including:

BIO143	The Cell	3 credits
This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class		

BIO143L	Lab: The Cell	1 credits
Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.		

BIO144	The Organism	3 credits
This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.		

BIO144L	Lab: The Organism	1 credits
Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.		

BIO490	Integrative Capstone	3 credits
The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.		

Pre-requisites Complete the following course:

- IND350W Scientific Research Methods

CHM107	Chemistry I This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109	3 credits
CHM108	Chemistry II The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CHM105 General Chemistry • CHM107 Chemistry I 	3 credits
IND350	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Students prepare a research proposal including literature review, experimental design and methods, budget, timetable, and bibliography. Other topics include professional presentation techniques and research ethics. The student's major department must approve proposals prior to the Tutorial.	2 credits
INTBIO303	Internship - Biology Internship - Biology	3 credits
MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.	3 credits

Note: Students in the Human Biology track may substitute PSY 213 for MTH 110

Minor in Biology

8 courses, including:

BIO143	The Cell	3 credits
<p>This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class</p>		
BIO143L	Lab: The Cell	1 credits
<p>Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.</p>		
BIO144	The Organism	3 credits
<p>This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.</p>		
BIO144L	Lab: The Organism	1 credits
<p>Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.</p>		

3 courses selected from biology courses numbered 200 or above; at least two of these must have a laboratory component.

1 biology elective or any science or mathematics course approved in advance and not already counted toward a major or minor.

Track: Human Biology

57 Credits of Required Courses and Restricted Electives

This track is designed for students interested in human biology and its application to allied health care professions (e.g., physician assistant studies, physical therapy, occupational therapy, and nursing.) This curriculum is also appropriate for students who wish to enter law, public health, and health policy fields with a strong science background. It contains 11 courses, including:

BIO123	Nutrition	3 credits
<p>An introduction to nutrients, their composition, functions, and sources. Human physiology, including digestion, metabolism, and excretion, is covered, along with special nutritional needs throughout the life cycle. Integrated with this basic information are special topics pertaining to diets, organic foods, preservatives, pesticides, world hunger, and other current concerns.</p>		

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits
BIO144	The Organism This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.	3 credits
BIO144L	Lab: The Organism Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.	1 credits
BIO201	Anatomy This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• BIO143 The Cell• BIO144 The Organism	3 credits
BIO201L	Lab: Anatomy Laboratory experiments emphasizing comparative anatomy between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• BIO143 The Cell• BIO144 The Organism	2 credits
BIO209	Basic Neuroscience This course is designed for wide appeal. It is an introduction to structure and function of the brain and spinal cord, and how nerves function and communicate. The basics of movement, sensation, language, emotion, and consciousness are discussed. Emphasis is placed on contrasting normal function with altered function in diseases. Three hours	3 credits

lecture per week.

Pre-requisites Complete all 3 of the following courses:

- BIO143 The Cell
- BIO144 The Organism
- CHM108 Chemistry II

BIO209LW	Basic Neuroscience Lab	2 credits
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Experiments and skills to compliment the material presented in BIO209. The lab course focuses on experimental procedures, scientific analysis and scientific writing. Three hours of laboratory per week. Laboratory Fee. Corequisite: BIO 209.

BIO217	Human Genetics	3 credits
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This course covers the underlying basis of genetic disorders. A foundation of basic genetic concepts such as Mendelian genetics and exceptions to Mendel's laws, chromosomal inheritance, and molecular genetics are taught and applied to the following advanced topics: epigenetics, medical genetics, cancer, biotechnology, population genetics, and evolutionary genetics.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

OR

BIO417	Genetics	3 credits
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This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.

Pre-requisites Complete all 3 of the following courses:

- BIO231W Cell and Molecular Biology
- CHM205 Organic Chemistry I
- MTH110 Elementary Statistics

BIO221	General Microbiology	3 credits
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The study of fundamental characteristics of bacteria and related microorganisms, including taxonomy, physiology, and distribution. Three class meetings per week.

Pre-requisites Complete all 3 of the following courses:

- BIO143 The Cell
- BIO144 The Organism
- CHM108 Chemistry II

BIO221L	<p>Lab: General Microbiology</p> <p>Experiments to complement the material in BIO221. Four hours of laboratory per week. Corequisite: BIO221. Additional Fee(s): Laboratory fees.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • BIO221 General Microbiology 	2 credits
BIO302	<p>Physiology</p> <p>This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 Anatomy 	3 credits
BIO302L	<p>Physiology Lab</p> <p>Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201L Lab: Anatomy 	2 credits

BIO419	<p>Immunology</p> <p>This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week. Prerequisite(s): BIO221 or BIO302</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO221 General Microbiology 	3 credits
OR		
BIO458	<p>Histology</p> <p>A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from text book, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.</p>	3 credits

Pre-requisites Complete the following course:

- BIO201 Anatomy

BIO490 **Integrative Capstone** **3 credits**

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- IND350W Scientific Research Methods

CHM108 **Chemistry II** **3 credits**

The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.

Pre-requisites Complete any 1 of the following courses:

- CHM105 General Chemistry
- CHM107 Chemistry I

CHM110L **Chemistry II Laboratory** **1 credits**

Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.

CHM205 **Organic Chemistry I** **3 credits**

Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.

Pre-requisites Complete all 2 of the following courses:

- CHM108 Chemistry II
- CHM110L Chemistry II Laboratory

CHM215L	Elementary Organic Laboratory Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.	2 credits
IND200W	Introduction to Scientific Research This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered. Pre-requisites Complete the following course: • ENG105 First-Year Writing	2 credits
IND350W	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.	2 credits
MTH151	Calculus I This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.	4 credits

Track: Cell and Molecular Biology

55-57 Credits of Required Courses and Restricted Electives

This track is designed for students who plan to enter a biological sciences graduate program or professional medical program (e.g., medicine, dentistry, veterinary sciences), and for those interested in career paths in biotechnology, biomedical research, and related areas. It contains 12 courses, including:

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits

BIO144	<p>The Organism</p> <p>This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.</p>	3 credits
BIO144L	<p>Lab: The Organism</p> <p>Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.</p>	1 credits
BIO231	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II 	3 credits
BIO408	<p>Developmental Biology</p> <p>A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO231 Cell and Molecular Biology • BIO231W Cell and Molecular Biology 	3 credits
BIO417	<p>Genetics</p> <p>This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO231W Cell and Molecular Biology • CHM205 Organic Chemistry I • MTH110 Elementary Statistics 	3 credits
BIO490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research,</p>	3 credits

or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- IND350W Scientific Research Methods

CHM108	Chemistry II The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• CHM105 General Chemistry• CHM107 Chemistry I	3 credits
CHM110L	Chemistry II Laboratory Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.	1 credits
CHM205	Organic Chemistry I Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• CHM108 Chemistry II• CHM110L Chemistry II Laboratory	3 credits
CHM215L	Elementary Organic Laboratory Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.	2 credits
CHM206	Organic Chemistry II Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• CHM205 Organic Chemistry I• CHM215L Elementary Organic Laboratory	3 credits

CHM216LW	Organic Chemistry Laboratory Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory 	2 credits
CHM338	Biochemistry I This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM205 Organic Chemistry I 	3 credits
CHM340L	Macromolecule Laboratory An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO. Additional Fee(s): Laboratory fee. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM338 Biochemistry I 	2 credits
MTH151	Calculus I This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.	4 credits
IND200W	Introduction to Scientific Research This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	2 credits
IND350W	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.	2 credits

PHY251	Principles of Physics I	4 credits
<p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 		

OR

PHY151	Fundamentals of Physics I	3 credits
<p>Introduction to the fundamental concepts of laws and mechanics. This is the first course in an algebra-based sequence. Topics include motion, Newton's Laws, gravity, conservation of energy and momentum, collisions, circular and harmonic motion, and waves.</p>		

PHY252	Principles of Physics II	4 credits
<p>Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PHY251 Principles of Physics I 		

OR

PHY152	Fundamentals of Physics II	3 credits
<p>This is the second course in an algebra-based sequence. Topics include electricity and magnetism, circuits, sound, optics, and relativity.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PHY151 Fundamentals of Physics I 		

PHY255L	Physics Laboratory I	1 credits
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Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.

OR

PHY155L	Fundamentals of Physics Laboratory I	1 credits
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An algebra-based exploration of the experimental techniques of classical physics, with applications to mechanics.

Co-requisites

- PHY151 Fundamentals of Physics I

PHY256L	Physics Laboratory II	1 credits
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Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.

OR

PHY156L	Fundamentals of Physics Laboratory II	1 credits
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An algebra-based exploration of the experimental techniques of classical physics, with applications to electricity, magnetism, sound, and optics. Three hours of laboratory per week. Co-requisite: PHY152.

Co-requisites

- PHY152 Fundamentals of Physics II

Minor in Botany

Botany, or plant biology, is the scientific study of plants, from algae to giant sequoia trees. A minor in botany is ideal for students who wish to supplement their studies in some other discipline with a concentrated study of plant life.

19-21 Credits of Required Courses*

BIO144	The Organism	3 credits
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This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.

OR

ENV129	Our Fragile Earth: A Scientific Perspective	3 credits
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This course introduces students to a wide range of environmental issues from a scientific perspective. Specific topics vary from year to year, but this course utilizes lectures, discussions, laboratories, guest speakers and field trips to increase knowledge about environmental problems as well as increase scientific knowledge and literacy.

OR

SUS201	Integrative Biology	3 credits
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This course will introduce traditional biological concepts from molecules to organisms within an integrative and applied framework. Students will learn the interdisciplinary nature and common approaches of biology through applied topics relevant to sustainability such as human and ecological health, freshwater and marine fisheries, energy sources, and climate dynamics.

BIO144L	Lab: The Organism	1 credits
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Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.

OR

ENV129L	Our Fragile Earth Lab	1 credits
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This lab offers hands-on opportunity to perform basic environmental lab skills, including water testing, bioassay, and greenhouse experiment protocol. The course may be taken independently as a freestanding environmental lab course. Two hours of laboratory per week. Additional Fee(s): Laboratory fee.

OR

SUS201L Integrative Biology Lab 1 credits

Laboratory exercises including data collection, small-scale experimentation, data modeling, and simulation will be experienced to complement the material covered in SUS 201. Two hours of laboratory will be held per week at the Eden Hall Campus aquatic science lab. Additional Fee(s): Laboratory fees = \$50.

CHM107 Chemistry I 3 credits

This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109

OR

CHM102 Chemistry in Context 3 credits

One semester lecture course with selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological and environmental issues. Topics include matter, energy, atomic and molecular structure, bonding, reaction chemistry, and radioactivity. Three hours of lecture per week. Not open to majors in biology or chemistry.

CHM109L Chemistry I Laboratory 1 credits

Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with the lectures in Chemistry 105 and Chemistry 107. Three hours of laboratory per week. Corequisite: CHM 105 or 107. Additional Fee(s): Laboratory fee.

OR

CHM102L Chemistry in Context Lab 1 credits

One semester laboratory course to accompany CHM102 Chemistry in Context. Two hours of lab per week. Not open to majors in biology or chemistry.

BIO224	Botany	3 credits
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An introduction to the structure and function of plants. Topics include the evolutionary rise of green plants, plant life cycles and development, plant physiology, plant ecology, and the morphology and taxonomy of vascular plants. The importance of plants for humans is discussed, including their use for food and medicine. Three hours of lecture per week.

Pre-requisites Complete all 2 of the following courses:

- BIO143 The Cell
- BIO144 The Organism

BIO224L	Lab: Botany	2 credits
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Experiments to complement the material presented in BIO224. Four hours of laboratory or field experience per week. Corequisite: BIO224. Additional Fee(s): Laboratory fees.

Co-requisites

- BIO224 Botany

Two (2) courses (minimum 6 credits) from the list below:

ENV250	Plants, People, and the Environment	3 credits
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An introduction to the uses of plants by humans. Topics include the form, structure and genetics of plants related to their use as sources of food, shelter, fiber, flavors, beverages, drugs, and medicines. Plant structure and reproduction are studied in lecture and in-class activities with a particular focus on relationships between the plant's structural, chemical, or physiological attributes and the agricultural plant. Agricultural policies will also be discussed. Three hours of lecture per week.

Pre-requisites Complete any 1 of the following courses:

- ENV116 Global Environmental Challenges
- ENV129 Our Fragile Earth: A Scientific Perspective

BIO484	Plant Physiology	3 credits
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This course is an introduction to the physiology and biochemistry of plants. Lectures and laboratory exercises cover plant cells, enzymes, transport of water and nutrients, metabolism, defenses against pathogens, gene expression, hormones, and responses to environmental stimuli. Three lectures per week.

Pre-requisites Complete any 1 of the following courses:

- CHM108 Chemistry II
- BIO224 Botany

AND

BIO484L	Lab: Plant Physiology	2 credits
	Experiments to complement the material presented in BIO384. Four hours of laboratory per week. Corequisite: BIO484. Additional Fee(s): Laboratory fees.	
	Co-requisites	
	• BIO484 Plant Physiology	

ENV208	Backpacking: Experiencing the Natural History of Western	3 credits
	Students learn local land-use and natural history, including soil formation, flora, and some fauna. Also covered are wilderness trip planning and leadership, including principles for minimizing human impacts and conserving outdoor spaces and wilderness heritage. One weekend overnight camping trip is required. Prior completion of 100-level science course is desirable.	

FST150	Food, Farm & Field	3 credits
	This course explores food, farm, and environment through readings, films, lectures, demonstrations, field trips, and on-farm and kitchen experiences in research and production problems. Activities include presentations on specific topics, group discussions, hands-on lab and field activities, individual and group presentations, field trips, and reflection through writing, video, and photography.	

FST320	Basic Agroecology	3 credits
	Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	

AND

FST320L	Growing Sustainably Lab	1 credits
	Through working with Chatham's Eden Hall Farm as well as visiting neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in classes. Topics will include basic principles of soil fertility, biodiversity, greenhouse production, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	

FST428	Tree Care	3 credits
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Tree care skills are integral to sustainable land and food system management. This course provides an introduction to arboriculture, tree climbing and pruning. It will teach proper tree pruning, basics of climbing, and basic equipment safety, applicable to tree work in urban or agricultural settings.

SUS355	Forestry	3 credits
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This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the Eden Hall woodland.

2022-2023 Course Catalog

Business Administration: Online Only - (BA)

The undergraduate business curriculum begins with a set of core courses which cover the basic functions of business and the environment in which business operates. Courses in management, microeconomics, marketing, finance, and accounting introduce students to today's business environment, and will serve to introduce the student to the basics of strategy, business operations, decision-making, marketing principles, sources and methods of financing business ventures, and internal controls. Two additional courses in macroeconomics and business law/ethics complete the core and promote an understanding of the environment in which business operates. This major is available only online.

Admission Requirements

Admission to the B.A. in Business Administration Completion Program will be based on:

- High school diploma or GED with a GPA of 2.5 or higher
- Completed free online application at <http://apply.chatham.edu>
- Admission Essay: Provide a description of your academic and professional goals. Assess how you believe that the completion of the BA degree will help you achieve these goals (minimum 500 words).
- Official Academic Transcripts from all regionally accredited colleges or universities previously attended
 - Students may receive transfer credits for courses in which they have received a letter grade of "C" or better.

Application materials may be addressed to:

Chatham University
Berry Hall/SCPS Admissions
Woodland Road
Pittsburgh, PA 15232

Learning Outcomes

Graduates of Bachelor of Arts programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Management graduates of bachelor's level programs will be able to:

- Understand management concepts and theories
- Analyze business strategies
- Describe ethical challenges and issues of social responsibility (including sustainability)

that business leaders and managers may encounter and develop approaches to the challenges posed by such issues.

Curriculum

Major Requirements

ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
BUS110	Business Statistics This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BUS105 Foundations of Business	3 credits
BUS171	Information Systems and Operations This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.	3 credits

BUS230W	<p>Organizational Behavior</p> <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different</p>	3 credits

stages of the firm's development.

BUS390	Human Resources Management	3 credits
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This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.

ECN101	Principles of Macroeconomics	3 credits
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The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.

OR

ECN102	Principles of Microeconomics	3 credits
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Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.

INTBUS303	Internship - Business	3 credits
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The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.

BUS490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete any 1 of the following courses:

- BUS312W Marketing Research
- BUS310W Business Analytics: Research Methods

Contact

College of Continuing and Professional Studies (scps@chatham.edu)

2022-2023 Course Catalog

Chemistry (BA/BS)

Approved by the American Chemical Society, the curriculum includes intensive preparation for graduate study and careers in the chemical industry or governmental laboratories.

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Write well on exams, short paper, long papers and laboratory reports.
- Make oral reports of varying lengths, either alone or as part of a team.
- Prepare and present posters at scientific meetings.
- Exhibit critical thinking when reading texts, lecture supplements, and other materials.
- Prepare a literature review and a bibliography on a topic in chemistry.
- Obtain relevant information from primary sources in a library or online.
- Demonstrate knowledge about the broad core of chemistry.
- Recognize and use connections of chemistry to biology, computing, and mathematics.
- Use ethical scientific methods in obtaining and evaluating data.
- Demonstrate proper methods in the design and conduct of research.
- Exhibit basic laboratory skills in such areas as preparing solutions and titration.
- Use chemical instrumentation and perform both qualitative and quantitative analyses.
- Be able to use computer hardware and software for chemical purposes.
- Demonstrate safety in the laboratory.
- Make proper disposal of wastes.

Learning Outcomes Matrix [PDF]

[» Click here to view more detailed learning outcomes listings for each course.](#)

Chatham University Chemistry

Buhl Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements (BA)

33 Credits of Required Courses and Restricted Electives

CHM108	<p>Chemistry II</p> <p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM105 General Chemistry • CHM107 Chemistry I 	3 credits
CHM110L	<p>Chemistry II Laboratory</p> <p>Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.</p>	1 credits
CHM205	<p>Organic Chemistry I</p> <p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 	3 credits
CHM206	<p>Organic Chemistry II</p> <p>Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I • CHM215L Elementary Organic Laboratory 	3 credits
CHM209	<p>Inorganic Chemistry</p> <p>A descriptive survey of inorganic chemistry, including bonding theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 	3 credits
CHM215L	<p>Elementary Organic Laboratory</p> <p>Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	2 credits

CHM216LW	Organic Chemistry Laboratory Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory 	2 credits
IND200W	Introduction to Scientific Research This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	2 credits
IND350W	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.	2 credits

9 additional credits in chemistry at the 300-level or above:		
CHM311	Physical Chemistry I Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM108 Chemistry II 	3 credits
CHM312	Physical Chemistry II Quantum mechanics, spectroscopy, introduction to symmetry, and introduction to statistical mechanics. Four hour lectures per week. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CHM311 Physical Chemistry I 	4 credits

CHM322	<p>Topics in Analytical Chemistry</p> <p>This course explores the fundamental chemical principles underlying modern chemical instrumentation. Students learn the advantages and limitations of these instruments, how to select the proper instrumental configuration for a specific experiment, and how to evaluate emerging chemical technologies. Three hours of lecture per week. Corequisite: CHM 318</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory <p>Co-requisites</p> <ul style="list-style-type: none"> • CHM318L Chemical Analysis Laboratory 	3 credits
CHM338	<p>Biochemistry I</p> <p>This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I 	3 credits
CHM339	<p>Biochemistry II</p> <p>Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM206 Organic Chemistry II • CHM338 Biochemistry I 	3 credits
CHM343	<p>Environmental Chemistry</p> <p>This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Cross-listed as ENV 443. Three hour lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I • CHM206 Organic Chemistry II • CHM209 Inorganic Chemistry • CHM215L Elementary Organic Laboratory • CHM216L Organic Chemistry Laboratory 	3 credits

*or additional course pre-approved by the Department Chair

Major Requirements (BS)

72 credits, including:

CHM108	Chemistry II The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• CHM105 General Chemistry• CHM107 Chemistry I	3 credits
CHM110L	Chemistry II Laboratory Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.	1 credits
CHM205	Organic Chemistry I Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• CHM108 Chemistry II• CHM110L Chemistry II Laboratory	3 credits
CHM206	Organic Chemistry II Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• CHM205 Organic Chemistry I• CHM215L Elementary Organic Laboratory	3 credits
CHM209	Inorganic Chemistry A descriptive survey of inorganic chemistry, including bonding theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals. Three hours of lecture per week. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CHM108 Chemistry II	3 credits

CHM215L	<p>Elementary Organic Laboratory</p> <p>Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	2 credits
CHM216LW	<p>Organic Chemistry Laboratory</p> <p>Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L Elementary Organic Laboratory 	2 credits
CHM311	<p>Physical Chemistry I</p> <p>Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 	3 credits
CHM312	<p>Physical Chemistry II</p> <p>Quantum mechanics, spectroscopy, introduction to symmetry, and introduction to statistical mechanics. Four hour lectures per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM311 Physical Chemistry I 	4 credits
CHM317L	<p>Integrated Chemistry Laboratory</p> <p>Experiments are selected to illustrate important principles of advanced experimental chemistry and familiarize students with important experimental methods. The course is intended to encourage students to think critically about the reliability of their experimental results in the light of their previous chemistry experience. Five hours of laboratory per week.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • CHM311 Physical Chemistry I 	2 credits
CHM318L	<p>Chemical Analysis Laboratory</p> <p>This laboratory teaches the proper design, implementation and analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Seven hours of laboratory per week. Cross-listed as BIO418. Additional Fee(s): Laboratory fee.</p> <p>Pre-requisites Complete the following course:</p>	3 credits

- CHM216L Organic Chemistry Laboratory

CHM322	Topics in Analytical Chemistry <p>This course explores the fundamental chemical principles underlying modern chemical instrumentation. Students learn the advantages and limitations of these instruments, how to select the proper instrumental configuration for a specific experiment, and how to evaluate emerging chemical technologies. Three hours of lecture per week. Corequisite: CHM 318</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• CHM215L Elementary Organic Laboratory <p>Co-requisites</p> <ul style="list-style-type: none">• CHM318L Chemical Analysis Laboratory	3 credits
CHM338	Biochemistry I <p>This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• CHM205 Organic Chemistry I	3 credits
CHM340L	Macromolecule Laboratory <p>An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO. Additional Fee(s): Laboratory fee.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• CHM338 Biochemistry I	2 credits
CHM490	Integrative Capstone <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• IND350 Scientific Research Methods	3 credits

IND200W	<p>Introduction to Scientific Research</p> <p>This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	2 credits
IND350W	<p>Scientific Research Methods</p> <p>This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.</p>	2 credits
MTH152	<p>Calculus II</p> <p>This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
PHY251	<p>Principles of Physics I</p> <p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
PHY252	<p>Principles of Physics II</p> <p>Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PHY251 Principles of Physics I 	4 credits
PHY255L	<p>Physics Laboratory I</p> <p>Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	1 credits

PHY256L	Physics Laboratory II	1 credits
Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.		

Chemistry 300-level Elective:

CHM339	Biochemistry II	3 credits
Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438		

Pre-requisites Complete all 2 of the following courses:

- CHM206 Organic Chemistry II
- CHM338 Biochemistry I

CHM343	Environmental Chemistry	3 credits
This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Cross-listed as ENV 443. Three hour lecture per week.		

Pre-requisites Complete any 1 of the following courses:

- CHM205 Organic Chemistry I
- CHM206 Organic Chemistry II
- CHM209 Inorganic Chemistry
- CHM215L Elementary Organic Laboratory
- CHM216L Organic Chemistry Laboratory

*or additional course pre-approved by the Department Chair

Minor Requirements

26 credits, including:

CHM107	Chemistry I	3 credits
This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109		

CHM108	Chemistry II	3 credits
<p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM105 General Chemistry • CHM107 Chemistry I 		
CHM205	Organic Chemistry I	3 credits
<p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 		
CHM206	Organic Chemistry II	3 credits
<p>Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM205 Organic Chemistry I • CHM215L Elementary Organic Laboratory 		
CHM209	Inorganic Chemistry	3 credits
<p>A descriptive survey of inorganic chemistry, including bonding theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 		
CHM311	Physical Chemistry I	3 credits
<p>Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II 		

OR

CHM338 Biochemistry I**3 credits**

This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.

Pre-requisites Complete the following course:

- CHM205 Organic Chemistry I

OR

Communication (Graphic Design, Human Communication, Journalism, Public Relations) (BA)

Communication is a degree targeted to new opportunities in a media-savvy world. Students in the major take a common set of core courses that prepares them for careers in an industry where convergence in print, broadcast, and online media is growing. Students then choose one of four concentrations: Human Communication, Journalism, Public Relations and Graphic Design.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Learning Outcomes

College-Wide Goals & Objectives

This section explains how the B.A. in Communication meets the overarching objectives at Chatham University.

1. Information Literacy

- a. Students must effectively locate and gather information for research and media-related analysis through a variety of information media.
- b. Students must be able to properly evaluate the quality of the information and its sources.
- c. Students must utilize their knowledge gathered from various media sources to render well-communicated, designed and conceptualized projects and/or research papers in response to their contextual analysis.

2. Critical Reading

- a. Students must evaluate their creative projects to critical communication studies through a combination of written and online texts, hand-outs, journal articles, and in-class lectures, conversations and demonstrations.
- b. Students must assess the quality of gathered and presented information as well as its sources.

3. Analytical Thinking

- a. Students must critically investigate and respond to case studies as well as the work of their peers during critique sessions.
- b. Students must look for multidisciplinary relationships between communication and other fields of research, examining the role of the communication professional within a broader social context.
- c. Students must exhibit a critical understanding of related technical concerns, representational issues, aesthetic practices, ideas and concepts through original projects and/or papers.

4. Problem Solving

- a. Students must transform critical and analytical research into well-conceptualized projects and informed responses.
- b. Students must be able to move from concept to project actualization.
- c. Students must have a strong understanding of the technical in order to properly troubleshoot and solve technical issues related to a project.

5. Public Written Communication

- a. Students must communicate clearly by writing research or response papers of various lengths, which support coursework requirements.
- b. Students must communicate their conceptual and creative concepts clearly in written project statements.
- c. Students must formulate a point of view and be able to defend it within the written format.

6. Public Oral Communication

- a. Students must communicate ideas clearly in oral presentations.
- b. Students must actively participate in classroom discussions and group critique sessions.
- c. Students must formulate a point of view and be able to defend it orally.

Program-Specific Goals & Objectives

This section explains the discipline-specific goals and objectives of the Bachelor of Arts in the Communication program.

1. Analysis and Context

- a. Students must demonstrate competence in researching facts for a communication context.
- b. Students must look for interdisciplinary relationships between communication and other fields of research.

2. Professional Writing and Speech Processes

- a. Students must develop and transform original concepts into well-conceptualized projects - demonstrating a competency in writing for Digital media, Public Relations, or Narrative.
- b. Students must demonstrate competence in research methods for the academic study of communication.
- c. Students must demonstrate competence in persuasive expression focused on speech and writing.

3. Technical Fundamentals

- a. Students must have knowledge of the technology they are utilizing for their projects (saving/storing files, various software packages and techniques, hardware, scanning, digital video/photo equipment, etc.).
- b. Students must create original projects that draw on their knowledge of the technological form in order to thoroughly investigate representation in news media and commercial media.

4. Professional Practice

- a. Students must develop editorial projects with an understanding of a diversified audience.

- b. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- c. Students must develop attitudes of professional responsibility and accountability.
- d. Students must develop professional discipline (time-management, organizational skills).

Curriculum

Required Courses for all Concentrations

COM101	Foundations Of Human Communication A survey of the discipline of communication studies with emphasis on multiple theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. This course explores the basic history, assumption, principles, processes, variables, methods, and specialization of human communication as an academic field of study.	3 credits
COM106	Media and Society The effects of mass communication on individuals and society, particularly as they relate to values and ethics, are examined. The course emphasizes the history and structure of the mass media.	3 credits
COM209	Intercultural Communication: Values and Ethics Course will provide the student with an appreciation of the complexities involved in the development of beliefs, attitudes and behaviors that reflect cultural values. This course will provide an understanding of the specific forces, which shape perceptions, feelings and behaviors of various cultural groups. These forces include socially constructed categories such as race, ethnicity, nationality, gender, socio-economic status, and religion. These will be explored in a variety of contexts, language, family structures and the handling of conflict of laws and ethics (cultural relativism) will be examined.	3 credits
COM234W	Persuasion This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.	3 credits
COM313	Special Topics Special Topics	3 credits

INTCOM303	Internship - Communication Internship - Communication	3 credits
COM490	Integrative Capstone The integrative capstone , undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • FDT300W Critical Theory 	3 credits

Major Requirements: Human Communication

COM251	News Writing and Editing This is an introduction to journalistic writing and editing for print and the Web. Students will explore lede writing, interviewing and structuring stories in a variety of styles. They also will learn Associated Press style. At the core of the class is an emphasis on ethics and news judgment.	3 credits
COM351	Advanced News Writing and Editing Students will build upon foundational skills and apply them to writing a variety of multi-source story styles, deadline writing, and briefs. The course also will cover advanced headline writing, copy editing, and media law basics, as well as the challenges and opportunities surrounding newsroom management/leadership in the digital age. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • COM251 News Writing and Editing 	3 credits
COM260W	Practical Public Relations Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.	3 credits
COM360	Advanced Public Relations Students will sharpen PR writing skills and critical thinking by applying communication theories and methods to analyzing case studies, developing multiplatform campaigns, and crafting crisis management plans. An emphasis on strategy will prepare students to work with clients in a range of industries, including small businesses, corporations, agencies, and nonprofits.	3 credits

Pre-requisites Complete any 1 of the following courses:

- COM260W Practical Public Relations
- COM260 Practical Public Relations

COM355	Organizational Communication	3 credits
<p>Organizational Communication will focus on five theoretical approaches to the study of communication in organizations. Those approaches are: classical, human relations/human resources, systems, cultural, and critical, with most time spent on the final theoretical perspective. Additionally, the course will examine how communication affects the gendered nature of the workplace.</p>		

Major Requirements: Journalism Concentration

COM251	News Writing and Editing	3 credits
<p>This is an introduction to journalistic writing and editing for print and the Web. Students will explore lede writing, interviewing and structuring stories in a variety of styles. They also will learn Associated Press style. At the core of the class is an emphasis on ethics and news judgment.</p>		

COM351	Advanced News Writing and Editing	3 credits
<p>Students will build upon foundational skills and apply them to writing a variety of multi-source story styles, deadline writing, and briefs. The course also will cover advanced headline writing, copy editing, and media law basics, as well as the challenges and opportunities surrounding newsroom management/leadership in the digital age.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• COM251 News Writing and Editing		

COM374	Documentary and Photojournalism	3 credits
<p>This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none">• ART152 Photography II - Introduction to Digital Photography• FDT150 Introduction to Digital Video Production		

Major Requirements: Public Relations Concentration

COM260W	Practical Public Relations	3 credits
<p>Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.</p>		
COM360	Advanced Public Relations	3 credits
<p>Students will sharpen PR writing skills and critical thinking by applying communication theories and methods to analyzing case studies, developing multiplatform campaigns, and crafting crisis management plans. An emphasis on strategy will prepare students to work with clients in a range of industries, including small businesses, corporations, agencies, and nonprofits.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • COM260W Practical Public Relations • COM260 Practical Public Relations 		
COM374	Documentary and Photojournalism	3 credits
<p>This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 		

Major Requirements: Graphic Design Concentration

Journalism Minor Requirements

ART141	Media Literacy	3 credits
<p>This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.</p>		
COM106	Media and Society	3 credits
<p>The effects of mass communication on individuals and society, particularly as they relate to values and ethics, are examined. The course emphasizes the history and structure of the mass media.</p>		

COM251	News Writing and Editing	3 credits
<p>This is an introduction to journalistic writing and editing for print and the Web. Students will explore lede writing, interviewing and structuring stories in a variety of styles. They also will learn Associated Press style. At the core of the class is an emphasis on ethics and news judgment.</p>		
COM255	The Communique Newsroom I	3 credits
<p>This PRO course is designed to give students hands-on training in the various roles that work together to make a multiplatform newsroom function by fulfilling a staff position with the Communique. Students will develop skills related to developing/pitching story ideas, beat reporting, story budgets, print newspaper design and digital journalism.</p>		
COM351	Advanced News Writing and Editing	3 credits
<p>Students will build upon foundational skills and apply them to writing a variety of multi-source story styles, deadline writing, and briefs. The course also will cover advanced headline writing, copy editing, and media law basics, as well as the challenges and opportunities surrounding newsroom management/leadership in the digital age.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • COM251 News Writing and Editing 		

Public Relations Minor

ART141	Media Literacy	3 credits
<p>This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.</p>		
COM106	Media and Society	3 credits
<p>The effects of mass communication on individuals and society, particularly as they relate to values and ethics, are examined. The course emphasizes the history and structure of the mass media.</p>		
COM234W	Persuasion	3 credits
<p>This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.</p>		

COM260W	Practical Public Relations	3 credits
<p>Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.</p>		
COM360	Advanced Public Relations	3 credits
<p>Students will sharpen PR writing skills and critical thinking by applying communication theories and methods to analyzing case studies, developing multiplatform campaigns, and crafting crisis management plans. An emphasis on strategy will prepare students to work with clients in a range of industries, including small businesses, corporations, agencies, and nonprofits.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • COM260W Practical Public Relations • COM260 Practical Public Relations 		

Graphic Design Minor

ART141	Media Literacy	3 credits
<p>This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.</p>		
ART225	Typography Design Studio	3 credits
<p>This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.</p>		
ART245	Design Praxis	3 credits
<p>This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.</p>		
ART353	Print Design	3 credits
<p>This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory</p>		

fee.

Pre-requisites Complete all 2 of the following courses:

- ART225 Typography Design Studio
- ART245 Design Praxis

ART365 Visual Communication

3 credits

This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.

BA to MA Communications degree (3+1)

2022-2023 Course Catalog

Creative Writing (BFA)

Creative Writing majors develop and hone their skills through a focused sequence of creative writing courses culminating in a capstone project. The program requires a firm grounding in literary forms and history, along with genre theory, literary theory, and literature study, in order to foster the development of a unique writing voice effectively positioned for communicative reach and creative impact.

Learning Outcomes

Students successfully completing the program will learn the following:

1. Genre and form

- a. Students understand distinctions between genres and forms (basic)
- b. Students can recognize and define a variety of forms and genres (proficient)
- c. Students can write in a variety of forms and genres (mastery)
- d. Students can maximize relationship between meaning and form/genre (advanced)

2. Metaphor

- a. Students can define metaphor
- b. Students can recognize and discuss metaphor at work in the writings of others
- c. Students can create and employ metaphor in their own work
- d. Students can articulate orally and on paper how metaphor works in their own writing, and that of published writers, to ensure strong BFA tutorial introduction and senses of self as writers

3. Revision

- a. Students understands the need to revise multiple times before a piece is ready or even moderately good
- b. Students can apply strategies and techniques learned in class for successful revision
- c. Students can help their peers in revision efforts, thereby contributing to the workshop experience
- d. Students can articulate their processes of revision orally and on paper to ensure strong BFA tutorial introduction and senses of self as writers

4. Voice

1. Students understand the concept of voice
2. Students sometimes write in a voice that is recognizable, and consciously work toward controlling voice, both theirs and that of their characters
3. Students have developed their own voices as writers, and recognize literary influence on their writing
4. Students have developed own voices, and can extend it to other characters or personae, without losing plausibility

5. Design (Arc—flow—plot)

1. Students can recognize direction/design in a piece
2. Students can plot simple stories or arc the direction of pieces of creative nonfiction
3. Students can see specific craft decisions beneath an organic appearance
4. Students can create plot lines which arrives through the characters' personalities/dilemmas

Chatham University Creative Writing (B.F.A.)

Lindsay House • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

12 courses, plus a major-related internship:

ENG100	Introduction to Literary Studies This course focuses on the principles and methods of close literary analysis to develop critical reading and thinking skills. By examining how culture relates to literature, students explore how ethnic heritage contributes to writing; how writers define community and culture; and how strong oral traditions translate into literary forms.	3 credits
ENG242	Introduction to Creative Writing This course introduces students to the distinguishing features and traditional elements of poems, plays, fiction, and nonfiction writing. Students read classic and contemporary works in each of these genres, while attending to how a given text adheres to or plays with generic norms. Readings in genre theory will accompany each unit of the course.	3 credits
ENG243	Creative Writing I Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ENG242 Introduction to Creative Writing	3 credits
ENG244	Creative Writing II Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse.	3 credits

Pre-requisites Complete the following course:

- ENG243 Creative Writing I

ENG350W	Seminar in Literary Theory and Scholarly Writing	3 credits
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An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Multicultural Literature
- ENG100 Introduction to Literary Studies

ENG490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- ENG350W Seminar in Literary Theory and Scholarly Writing

INTENG303	Internship - English	3 credits
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Internship - English

3 Literature survey courses

1 English Content Course at 300-level or above

2 300-level or above Creative Writing Courses

Literature Survey Courses

Student must choose three literature survey courses from the following:

ENG204	World Literature	3 credits
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A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Introduction to Literary Studies

- ENG105 First-Year Writing

ENG207	<p>British Writers I</p> <p>A critical and historical approach to major writers in English during the Anglo-Saxon, medieval, and Renaissance periods, including such representative authors as the Beowulf poet, Chaucer, Spenser, Shakespeare, Donne, and Milton.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG208	<p>British Writers II</p> <p>A critical and historical approach to major writers in English during the Augustan, Romantic, and Victorian periods, including such representative authors as Swift, Pope, Johnson, Wordsworth, Keats, Arnold, Tennyson, and Browning.</p>	3 credits
ENG216W	<p>American Writers I</p> <p>A study of cultural and literary developments in America, beginning with the Puritans and culminating with the writers of the American Renaissance: Emerson, Thoreau, Douglass, Hawthorne, and Melville.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG217W	<p>American Writers II</p> <p>A continuation of English 216, with emphasis on such figures as Whitman, Dickinson, Twain, Henry James, Faulkner, and Sylvia Plath.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG321W	<p>Shakespeare Survey</p> <p>A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG207 British Writers I • ENG216 American Writers I • ENG216W American Writers I 	3 credits

ENG287	African-American Writers	3 credits
<p>This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnutt, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 		

English Content Courses

Student must choose one English Content Course at 300-level or above (these offerings vary, below is a selection):

ENG321W	Shakespeare Survey	3 credits
<p>A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG207 British Writers I • ENG216 American Writers I • ENG216W American Writers I 		
ENG385	Toni Morrison Seminar	3 credits
<p>This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 		
ENG425	Bleak Houses: Shifting Landscapes of the English Novel	3 credits
<p>This course will cover the modern European novel through the thematic rubric of "love and lies." The latter theme affords the opportunity to consider fiction not only as a medium of the literary genre of the novel but also as a discourse of self-expression, self-creation, and in the cases of some of our lying protagonists, self-destruction. Students will focus on characters' constructions of "truth" and "lies" as these concepts are informed by characters' emotional positions. At its most ambitious, this focus on the dynamic of intersubjectivity not only provides important insights into the literature we will read but also enhances students' understanding of the interpersonal connections that drive individuals' worldviews and narratives.</p>		

ENG449	Exiles	3 credits
<p>This course will examine the 20th-century condition of exile in relation to its different configurations, from European émigrés to postcolonial subjects to experiences of exile in the United States, to the relation of exile to Diaspora (African, Indian, and Jewish). Students will see how different patterns of movement define subjects variously as exiles, migrants, nomads, and tourists. They also will approach the concept of exile from psychological, geographical, and cultural angles to understand the different uses of the term, its scope, and its limitations.</p>		
ENG452	Ecofeminist Literature	3 credits
<p>This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG287 African-American Writers • ENG207 British Writers I 		

Creative Writing Courses

Two 300-level or above Creative Writing Courses from the following (one of these must be a special topics course in the area of student Integrative Capstone OR a graduate writing course in the student's primary genre, with permission of instructor and the MFA Program Director.):

ENG310	Summer Community of Writers	3 credits
<p>The ten-day intensive residency in Pittsburgh is for upper-level BFA Creative Writing students. The residency is composed of genre-specific craft sessions, workshops, lectures, readings and one-on-one conferences with mentors.</p> <p>Pre-requisites Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • ENG242 Introduction to Creative Writing • ENG243 Creative Writing I • ENG244 Creative Writing II • ENG245 Advanced Writing Workshop 		
ENG313	Special Topics	3 credits
<p>Special Topics</p>		
ENG327	Writing About Environment Science	3 credits
<p>This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English</p>		

and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Three hours of lecture per week. Cross-listed as ENV 327.
Pre-requisite: any 200-level ENV course or permission of either department chairperson.

Pre-requisites Complete any 1 of the following courses:

- ENV201 Special Topics
- ENV202 Exercise and the Environment
- ENV213V Special Topics
- ENV217 Env Solutions-systems
- ENV221E Organic Gardening
- ENV222E Organic Gardening
- ENV224 Environmental Sculpture
- ENV225 Environmental Ethics
- ENV230 Wilderness- Food Sustainability
- ENV230W Wilderness - Food Sustainability
- ENV231 Wilderness & Food Sustainability
- ENV233 Soundscapes:mus-nat-silnc
- ENV242 Women and the Global Environment
- ENV250 Plants, People, and the Environment
- ENV255 Soundscapes: Music, Nature, and Silence
- ENV262 Environmental Economics
- ENV265 Environmental Economics
- ENV275 Ecological Economics
- ENV285 Internatl Env Policy

ENG355 Advanced Writing and Stylistics

3 credits

This is an advanced writing class which concentrates on style, meaning, and effect. It is designed for upper-level students, and emphasizes the skills of writing more effective sentences, paragraphs and essays. The course focuses on writing academic papers, applications, proposals, and personal statements across the disciplines in appropriate formats.

ENG365 Writing Fiction

3 credits

This is an upper-level course for BFA students specializing in fiction. Reading and writing will center on the craft of fiction and will include exploration of tools for creating character, scene, sense of place, summary, dialogue, framing, flashbacks, and transitions, as well as oral presentation and publication.

Pre-requisites Complete all 2 of the following courses:

- ENG242 Introduction to Creative Writing
- ENG100 Introduction to Literary Studies

ENG366 Writing Nonfiction

3 credits

This is an upper-level course for BFA students specializing in creative nonfiction. Reading and writing will center on the craft of nonfiction and will include exploration of tools for scene, sense of place, point of view, character and narrator development, tone, lyricism, structure, as well as oral presentation and publication.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Multicultural Literature
- ENG100 Introduction to Literary Studies
- Complete the following course:
- ENG242 Introduction to Creative Writing

ENG367	Multi-Genre Writing	3 credits
<p>This is an upper-level course for BFA students focusing on creative writing for experienced writers, geared toward preparing a finished manuscript or portfolio of work for potential publication in the student's primary genre. Students read and write in the craft of poetry, fiction, and creative nonfiction. Offered every spring.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG242 Introduction to Creative Writing 		
ENG368	Writing Poetry	3 credits
<p>This is an upper-level course for BFA students specializing in poetry. Reading and writing will center on the craft of poetry and will include exploration of poetic tools including figures of speech, meter, music and rhythmic devices in both traditional and experimental forms, and oral performance and publication of poetry.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Multicultural Literature • ENG100 Introduction to Literary Studies Complete the following course: • ENG242 Introduction to Creative Writing 		
<p>Graduate writing courses (student needs permission of instructor and MFA Program Director):</p>		
ENG523	The Craft of Creative Writing: Multiple Genres	3 credits
<p>This course may substitute for any other craft course for students specializing in any genre. Students will be introduced to the craft of poetry, fiction, and non-fiction, and will also be introduced to the workshop method and given instruction on sending out work for publication.</p>		
ENG581	The Craft of Fiction	3 credits
<p>This is a required course for MFA students specializing in fiction. Students will experiment with creating scene, sense of place, summary, dialogue, framing, flashbacks, and transitions. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		
ENG582	The Art and Craft of Narrative	3 credits
<p>Readings and writing in this multi-genre course will focus on constructing narratives in fiction, nonfiction, poetry or writing for children. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		

ENG583	The Art and Craft of the Lyric	3 credits
<p>Readings and writing in this multi-genre course will focus on writing lyrically in poetry and prose. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		

Creative Writing Minor Requirements

The minor in Creative Writing draws upon the strengths of the undergraduate English program and the graduate faculty of the Master of Fine Arts program. Students who choose this minor may be interested in pursuing a graduate degree in creative writing or looking to enter careers as professional writers. Designed in conjunction with a faculty member in the English program, individual programs of study require the approval of the division chairperson.

ENG100	Introduction to Literary Studies	3 credits
<p>This course focuses on the principles and methods of close literary analysis to develop critical reading and thinking skills. By examining how culture relates to literature, students explore how ethnic heritage contributes to writing; how writers define community and culture; and how strong oral traditions translate into literary forms.</p>		

ENG242	Introduction to Creative Writing	3 credits
<p>This course introduces students to the distinguishing features and traditional elements of poems, plays, fiction, and nonfiction writing. Students read classic and contemporary works in each of these genres, while attending to how a given text adheres to or plays with generic norms. Readings in genre theory will accompany each unit of the course.</p>		

ENG243	Creative Writing I	3 credits
<p>Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG242 Introduction to Creative Writing 		

ENG244	Creative Writing II	3 credits
<p>Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG243 Creative Writing I 		

2 300-level or above writing-intensive courses or graduate writing workshops with permission of the director of the MFA program.

2022-2023 Course Catalog

Criminology (BA)

Criminology is the scientific study of crime and delinquency. Criminologists use concepts, theories, and methods from the social and behavioral sciences (sociology, criminal justice, political science, social work, legal studies) to explore the causes and consequences of criminal behavior and juvenile delinquency. Criminologists study the effects of legal and social policies, analyze data on crime perpetration and victimization, design and assess crime prevention and control models, and evaluate offender treatment programs. The program offers a major and minor in criminology. Completing the criminology major prepares students for graduate study in criminology, criminal justice, law, or other social/ behavioral sciences; and for entry level positions in legal, correctional, or human services agencies.

Learning Outcomes

Criminology program goals provide the basis for program assessment. Specific learning objectives tied to each course will follow from these program goals and guide the evaluation of student learning.

Upon completion of the Criminology major students will demonstrate mastery of knowledge and/or skills in the following areas:

- Administration of Justice: Demonstrate knowledge of the purpose and functioning of the contemporary American criminal justice system, and distinctions between adult and juvenile justice systems.
- Criminological theory: Demonstrate knowledge of theories of crime, offender typologies, and victimology.
- Law Enforcement: Demonstrate knowledge of history, theory, practice and legal environment of law enforcement and police organizations.
- Law adjudication: Demonstrate knowledge of criminal law, criminal procedures, prosecution, defense, court procedures, and decision-making.
- Corrections: Demonstrate knowledge of the history, theory, practice and legal environment of American corrections.
- Research and analytic methods: Demonstrate knowledge of quantitative and qualitative methods for conducting and analyzing ethical criminal justice research.
- Demonstrate knowledge of diversity issues in criminal justice.
- Demonstrate professional behavior in an applied setting related to criminal justice or criminology.

Chatham University Criminology

Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

12 courses, including:

CRM101	Introduction to Criminal Justice This course is an introduction to U.S. criminal justice system. Topics covered include the nature of crime, law, justice, police, functions of courts, and the effectiveness of punishment and sanctions. Also explored will be the roles of various professionals in the system to introduce students to potential career paths.	3 credits
CRM224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as SWK 224.	3 credits
CRM225W	Criminology Criminology is the study of crime, its causes and effects. This course covers definitions and types of crime, research methods, theories of criminal behavior and responses to crime. Crimes against people, property, and organizations will be examined, and biological, psychological, and sociological explanations will be discussed. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CRM101 Introduction to Criminal Justice	3 credits
CRM305	Law Enforcement and Criminal Investigations Survey of the history, theory, and practice of criminal investigations conducted by law enforcement officers and private investigators. Crime scene documentation, search and seizure, interview and interrogation, suspect identification and arrest procedures are applied to both violent and property crimes. Report writing and courtroom presentation are also covered. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CRM101 Introduction to Criminal Justice	3 credits
CRM310	Survey of Corrections This course provides both a historical and contemporary exploration of correction methods utilized in the United States. This course examines the philosophy, theory, and practices involved in the control and behavior modification of offenders. Issues of inequality and at-risk populations are explored. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CRM101 Introduction to Criminal Justice	3 credits

INTCRM303	Internship - Criminology Internship - Criminology	3 credits
CRM490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • PSY213 Statistics and Research Design • PSY314W Foundations of Behavioral Research 	3 credits
PSY101	General Psychology An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.	3 credits
OR		
SWK101	Introduction to Sociology This course introduces students to the basic sociological concepts, including sociological imagination, socialization, social institutions, social stratification, and social inequality. Emphasis is placed on conceptual tools necessary for the analysis of the influence of social structures on human behavior and life chances.	3 credits
PSY213	Statistics and Research Design This course is designed to introduce students to essential research tools. Topics include frequency distributions, indices of central tendency, variability, and various inferential statistics, including nonparametric techniques. This course also examines research design procedures with an emphasis on analysis of variance. Priority given to psychology, social work and forensics majors. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY314W	Foundations of Behavioral Research This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.	3 credits

Pre-requisites Complete the following course:

- PSY213 Statistics and Research Design

1 of the following or substitute electives approved by the program coordinator:

CRM220	Women and the Criminal Justice System	3 credits
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This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.

CRM313	Special Topics	3 credits
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This course allows in-depth exploration of a special topic in criminology. Possible topics include organized crime, the death penalty, victimization of children and adolescents, and media portrayals of forensics and forensic professionals.

Pre-requisites Complete the following course:

- CRM101 Introduction to Criminal Justice

CRM320	Criminalization of Mental Illness	3 credits
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This course explores the intersection of the criminal justice and mental health systems. Areas of focus include: the impact of governmental policies, law changes, prevalence of mental illness among offender populations, the biopsychosocial status of offenders, and interventions that assist offenders transitioning back into society.

Pre-requisites Complete any 1 of the following courses:

- CRM101 Introduction to Criminal Justice
- PSY101 General Psychology
- SWK101 Introduction to Sociology

CRM332	History of Crime and Punishment	3 credits
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This course will provide an introduction to the historical study of crime and punishment. Specifically, the course will examine definitions of crime, goals of punishment, and how these forms of crime and punishment reflect the structure of that society within that specific historical context.

Pre-requisites Complete the following course:

- CRM101 Introduction to Criminal Justice

CRM340	Violent and Predatory Crimes	3 credits
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The criminology and victimology of violent and predatory crimes are explored from psychological, sociological, and biological perspectives. Serial, spree, rampage, and mass murder are covered. Students will gain increased understanding of violent and predatory criminals, their victims, social science research methods, forensic investigations, and criminal law.

Pre-requisites Complete the following course:

- CRM101 Introduction to Criminal Justice

CRM362	What is Evil? This course will utilize an interdisciplinary framework (criminology, sociology, psychology, history, political science) to examine definitions of "evil," motivations to commit "evil" actions, social reactions to "evil," and control of "evil." Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice • PSY101 General Psychology 	3 credits
PSY331	Social Psychology An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY333	Abnormal Behavior A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY340	Psychopharmacology The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
SWK201W	Human Behavior in the Social Environment I This course examines the development of individuals, couples, and families from birth to death within the framework of relevant biological, psychological, sociological, and social work research and theory. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits

SWK202	Human Behavior in the Social Environment II	3 credits
	<p>This course is a continuation of SWK 201W. It examines the development of individuals, couples, and families from adolescence to death within social work research and theory. Also explored are systems that influence gender, race, ethnicity, social, and economic influences within the context of families, groups, organizations, institutions, and communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK201W Human Behavior in the Social Environment I 	
SWK321	Social Welfare and Social Justice	3 credits
	<p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	
SWK325	Deviant Behavior	3 credits
	<p>This course examines deviance using biological, psychological, and sociological perspectives. Emphasis is placed on examining the influence of social, cultural, historical, political, and economic context in the identification, labeling, and control of deviant behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK101 Introduction to Sociology 	

Minor Requirements

The criminology minor is primarily intended for students interested in careers in human services or criminal justice. The social science foundation of this minor particularly complements the B.A. degrees in psychology and social work available at Chatham.

2 required courses:

CRM101	Introduction to Criminal Justice	3 credits
	<p>This course is an introduction to U.S. criminal justice system. Topics covered include the nature of crime, law, justice, police, functions of courts, and the effectiveness of punishment and sanctions. Also explored will be the roles of various professionals in the system to introduce students to potential career paths.</p>	
CRM225W	Criminology	3 credits
	<p>Criminology is the study of crime, its causes and effects. This course covers definitions and types of crime, research methods, theories of criminal behavior and responses to crime. Crimes against people, property, and organizations will be examined, and biological, psychological, and sociological explanations will be discussed.</p> <p>Pre-requisites Complete the following course:</p>	

- CRM101 Introduction to Criminal Justice

3 electives from the following, or substitute courses approved by program coordinator:

CRM220	Women and the Criminal Justice System This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.	3 credits
CRM224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as SWK 224.	3 credits
CRM305	Law Enforcement and Criminal Investigations Survey of the history, theory, and practice of criminal investigations conducted by law enforcement officers and private investigators. Crime scene documentation, search and seizure, interview and interrogation, suspect identification and arrest procedures are applied to both violent and property crimes. Report writing and courtroom presentation are also covered. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits
CRM310	Survey of Corrections This course provides both a historical and contemporary exploration of correction methods utilized in the United States. This course examines the philosophy, theory, and practices involved in the control and behavior modification of offenders. Issues of inequality and at-risk populations are explored. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits
CRM313	Special Topics This course allows in-depth exploration of a special topic in criminology. Possible topics include organized crime, the death penalty, victimization of children and adolescents, and media portrayals of forensics and forensic professionals. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits

CRM340	Violent and Predatory Crimes The criminology and victimology of violent and predatory crimes are explored from psychological, sociological, and biological perspectives. Serial, spree, rampage, and mass murder are covered. Students will gain increased understanding of violent and predatory criminals, their victims, social science research methods, forensic investigations, and criminal law. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits
CRM320	Criminalization of Mental Illness This course explores the intersection of the criminal justice and mental health systems. Areas of focus include: the impact of governmental policies, law changes, prevalence of mental illness among offender populations, the biopsychosocial status of offenders, and interventions that assist offenders transitioning back into society. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice • PSY101 General Psychology • SWK101 Introduction to Sociology 	3 credits
CRM332	History of Crime and Punishment This course will provide an introduction to the historical study of crime and punishment. Specifically, the course will examine definitions of crime, goals of punishment, and how these forms of crime and punishment reflect the structure of that society within that specific historical context. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits
CRM362	What is Evil? This course will utilize an interdisciplinary framework (criminology, sociology, psychology, history, political science) to examine definitions of "evil," motivations to commit "evil" actions, social reactions to "evil," and control of "evil." Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice • PSY101 General Psychology 	3 credits

Cultural Studies: African American Studies Concentration (BA)

Cultural Studies is an interdisciplinary major that examines issues of race, ethnicity, class, and culture. Drawing on social, cultural, and literary theories, this major introduces methods of interpretation for the analysis of cultural objects in their social contexts. Students learn to apply contemporary theory in their critical analysis of literature, film, and other cultural narratives. A required core of courses provides students with the tools necessary to analyze representations of culture. The electives allow students the opportunity to focus on an aspect of the field that meets their particular interests. Students pursuing the concentration in African American Studies will study the history, culture, politics, religion and literature of the African Diaspora – the communities created by the dispersion of peoples from the African continent.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Learning Outcomes

Upon successful completion of the major in Cultural Studies, the student will be able to:

- synthesize and apply theoretical concepts to cultural texts, including literature, film, media and public spaces.
- generate a thesis and sustain an argument by using secondary sources and criticism relevant to a topic.
- apply terms of cultural analysis in conjunction with cultural theory in the service of a coherent argument.
- articulate the relationship between cultural representation and material practices.
- locate and define one's own theoretical position in relation to scholarly sources.
- present and defend one's own critical position in formal arenas.

Curriculum

Cultural Studies: African American Studies Concentration

12 courses, including

CST183

Representations of Race and Gender

3 credits

This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.

ENG350W	<p>Seminar in Literary Theory and Scholarly Writing</p> <p>An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Multicultural Literature • ENG100 Introduction to Literary Studies 	3 credits
ENG385	<p>Toni Morrison Seminar</p> <p>This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
FDT300	<p>Critical Theory</p> <p>Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.</p>	3 credits
ENG287	<p>African-American Writers</p> <p>This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnutt, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
HIS285	<p>African-American History</p> <p>This course examines the history of African Americans within a global context from the 1500s through present. The course explores the role of West Africa in the Atlantic economy and slave trade; the nature of slavery in the US as compared to Latin America; emancipation in the US and Latin America; industrialization and migration; and the civil rights movement in its international context.</p>	3 credits

1 Film Studies elective (3)

INTCST303	Internship - Cultural Studies Internship - Cultural Studies	3 credits
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CST490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ENG350W Seminar in Literary Theory and Scholarly Writing	3 credits
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Integrative Capstone must confront a significant cultural studies topic and demonstrate the relationship between cultural studies and the other subject in the major

Interdisciplinary Major Requirements

10 courses, exclusive of the Integrative Capstone:

CST183	Representations of Race and Gender This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.	3 credits
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ENG350W	Seminar in Literary Theory and Scholarly Writing An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ENG100 Multicultural Literature• ENG100 Introduction to Literary Studies	3 credits
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ENG385	Toni Morrison Seminar This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.	3 credits
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Pre-requisites Complete the following course:

- ENG105 First-Year Writing

FDT300

Critical Theory

3 credits

Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.

1 film-related course

2 courses in multi-ethnic studies

2 courses in African-American studies

1 Internship (3)

Integrative Capstone must confront a significant cultural studies topic and demonstrate the relationship between cultural studies and the other subject in the major

Minor Requirements

Cultural Studies is not available as a minor. See Minor Requirements for African-American Studies.

2022-2023 Course Catalog

Economics (BA)

The Economics major provides a flexible and attractive skill set in key areas: statistics, managerial economics, decision-making, and global and emerging markets. Through coursework and hands on experience you 'll develop verbal and written communication skills that are critical in the workplace. A degree in economics is excellent preparation for graduate study in law, policy, or business.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of bachelor's-level programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Economics graduates of bachelor's level programs will be able to:

- Conduct analyses of macroeconomic issue(s) based on both macroeconomic and microeconomic models and theories
- Analyze the impacts of government policies in terms of market efficiency, economic growth, price stability, and financial stability
- Demonstrate written communication skills to be used for economic issue and policy analysis

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	Financial Accounting Principles I <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
ACT223	Managerial Accounting Principles <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS105	Foundations of Business <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS110	Business Statistics <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS171	Information Systems and Operations <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits
BUS230W	Organizational Behavior <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics	3 credits
	Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	
INTBUS303	Internship - Business	3 credits
	The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	
ECN490	Integrative Capstone	3 credits
	The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • BUS310W Business Analytics: Research Methods • BUS312W Marketing Research 	

Economics Major

5 courses

2 required courses:

ECN330	Global Financial System and the Macro Economy	3 credits
	Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ECN101 Principles of Macroeconomics • ECN102 Principles of Microeconomics 	
ECN331	Managerial Economics	3 credits
	This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.	

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

3 courses from the following:

ECN262	Global Environmental Economics	3 credits
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This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN351	International Trade and Finance	3 credits
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An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
- ECN101 Principles of Macroeconomics

ECN355	Economic Analysis of Public Policy	3 credits
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This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN358W	Economic Development	3 credits
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An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
- ECN101 Principles of Macroeconomics

Intradisciplinary Major in Two Business Disciplines

Students who wish to do an Intradisciplinary major in two business concentrations must complete the Business Core Major Requirements, plus the following courses:

ECN330	Global Financial System and the Macro Economy	3 credits
	Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none">• ECN101 Principles of Macroeconomics• ECN102 Principles of Microeconomics	
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ECN331	Managerial Economics	3 credits
	This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none">• ECN102 Principles of Microeconomics	

2 Approved Economics major electives

Interdisciplinary Major in Economics

Students who wish to do an interdisciplinary major in a business area (Accounting, Economics, International Business, Management, or Marketing) and a non-business discipline will complete the following courses (10 courses, exclusive of Integrative Capstone):

ACT222	Financial Accounting Principles I	3 credits
	This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	
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BUS105	Foundations of Business	3 credits
	This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	

BUS110	Business Statistics	3 credits
<p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p>		

Pre-requisites Complete the following course:

- BUS105 Foundations of Business
-

BUS310W	Business Research and Analytics	3 credits
<p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p>		

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
 - MTH110 Elementary Statistics
 - PSY213 Statistics and Research Design
-

OR

Prerequisite course for Capstone (xxx490) in the other discipline

ECN101	Principles of Macroeconomics	3 credits
<p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>		

ECN102	Principles of Microeconomics	3 credits
<p>Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.</p>		

ECN330	Global Financial System and the Macro Economy	3 credits
<p>Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.</p>		

Pre-requisites Complete all 2 of the following courses:

- ECN101 Principles of Macroeconomics
- ECN102 Principles of Microeconomics

ECN331	Managerial Economics	3 credits
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This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

2 upper-level Economics electives

ECN262	Global Environmental Economics	3 credits
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This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN351	International Trade and Finance	3 credits
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An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
- ECN101 Principles of Macroeconomics

ECN355	Economic Analysis of Public Policy	3 credits
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This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN358W	Economic Development	3 credits
<p>An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics • ECN101 Principles of Macroeconomics 		

Minor Requirements

6 courses, including:

ECN101	Principles of Macroeconomics	3 credits
<p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>		

ECN102	Principles of Microeconomics	3 credits
<p>Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.</p>		

4 Approved upper-level Economics electives:

ECN330	Global Financial System and the Macro Economy	3 credits
<p>Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.</p>		

Pre-requisites Complete all 2 of the following courses:

- ECN101 Principles of Macroeconomics
- ECN102 Principles of Microeconomics

ECN331	Managerial Economics	3 credits
<p>This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.</p>		

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN262	Global Environmental Economics	3 credits
	<p>This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 	
ECN351	International Trade and Finance	3 credits
	<p>An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics • ECN101 Principles of Macroeconomics 	
ECN355	Economic Analysis of Public Policy	3 credits
	<p>This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 	
ECN358W	Economic Development	3 credits
	<p>An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics • ECN101 Principles of Macroeconomics 	

2022-2023 Course Catalog

Education (BA)

This program involves both classroom study and extensive field experiences, culminating in a fulltime, semesterlong Student Teaching experience. In accordance with the Pennsylvania State Department of Education (PDE) requirements, candidates must satisfy all regulations pertaining to teacher training contained in the Pennsylvania School Code. These regulations are subject to change by the State of Pennsylvania. Students will be required to comply with any such regulations that are instituted before they can apply for certification through PDE. In addition, students must have a valid (less than one year old) Child Abuse, Pennsylvania Criminal History and Federal Criminal History Record to enter a school for any and all field work. A P.P.D Tuberculin (TB) Test and a physical exam may also be required to complete field work. Students must apply for clearances the semester prior to taking a course with an embedded field placement as it may take up to 6-8 weeks to obtain clearances. Additionally, because education courses contain embedded field placements, are based on mastery of Pennsylvania Department of Education competencies and course content is linked to Pennsylvania Standards, non-Education majors are welcome to enroll in courses, but must be aware of these unique requirements and meet state and PDE requirements.

Once a student earns 48 credits of classwork (or transfers in 48 credits or more) they must apply for advance standing in the education department to receive formal admission per PDE regulations. To be formally admitted to the program for advance standing, a candidate must successfully complete 48 credit hours of coursework, pass all PAPA exams, provide two letters of recommendations and complete an Application for Advanced Standing. Students should contact their advisors for further details.

Requirements for Recommendation for State Certification in Teaching:

The Teacher Preparation Program is a professional program that recommends students for teacher certification in PreK-4 education (PreK-4) and secondary (7-12), biology, chemistry, English, mathematics, physics, and social studies certification. The Teacher Preparation Program also offers K-12 certification in art, this area will require some coursework in both elementary and secondary education. Candidates interested in art education should contact the certification officer or program director. Due to the extensive, hands-on experience in real world classrooms, courses may be offered during the day, in the evening or online.

Curriculum

PreK-4 Education Major Requirements

The Liberal Arts Major in PreK-4 Education offers a comprehensive preparation program for teaching young children, predicated on a foundation in the liberal arts. Students in the program are required to complete the general education requirements, as well as the sequence of professional preparation courses. Students in secondary and K-12 certification areas must complete the general education requirements, a major in the academic discipline, as well as the sequence of professional preparation courses.

EDU104	Perspectives on Education Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee	3 credits
EDU105	Child Development: Birth Through Grade 4 This course addresses physical, social, cognitive, and moral development from prenatal stages through middle childhood. Students examine child development in the context of social, cultural, instructional settings. Using case studies, the implications of growth and development on instructional planning for effective learning is achieved. Students learn to create environments that are healthy, respectful, supportive and challenging for all children.	3 credits
EDU108	Play and Movement A range of games and activities are explored in terms of functional movements and progression towards mature forms of selected physical skills. Healthy warm-up and participation strategies will be part of the exploration of each game. Games will be analyzed in terms of developmental appropriateness and the involvement of certain muscle groups and skill requirements. Students design an original game targeting the development of age-specific skills.	1 credits
EDU205	ELL Teaching Strategies for Classroom Teachers This course explores how effective language development results in children who successfully learn to read and can use reading effectively in academic subject areas and to negotiate the world. A major focus of this course is on information and methods for enhancing the literacy and academic experiences of students in grades K-12 classified as English as second language (ELL) students.	3 credits
EDU207	Trends and Issues in Early Childhood Education Students in this course will examine current and contemporary issues surrounding early childhood education. Class discussions focus on sociological, psychological, political, and economic forces shaping families, children and early educational experiences. Students will explore the connection between curriculum and physical environment. Major approaches and theories in early childhood curriculum are explored in terms of the cognitive, social and physical dimensions. Emphasis is placed on the physical expression of early childhood learning theory. Issues of health and safety, including state and federal regulations are also explored.	3 credits
EDU219W	Cognitive Learning Theories This course addresses brain and cognitive development from prenatal stages through middle childhood. Students examine child development in the context of learning theories. The implications of physical and social growth and development on instructional planning for effective learning are explored. A field experience where theories and concepts can be observed is part of this course and serves to inform classroom discussion and activities.	3 credits

EDU230	Mathematical Foundations	3 credits
	<p>This course relates the principles and process skills of basic mathematics to effective teaching with the best practices in the classroom. Concrete experiences with manipulatives and hands-on learning are an important piece in this course. In this course, students will acquire the skills necessary for informed decision-making in planning, facilitation of learning based on knowledge or research, best practices, state and national performances standards, and assessments.</p>	
EDU234	Inclusion: Issues and Strategies	3 credits
	<p>This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.</p>	
EDU240	Integrating the Arts	3 credits
	<p>This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of other subjects in the elementary curriculum. Students examine national and PA Academic Standards of the Arts and Humanities in Art, Music, Theater, and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.</p>	
EDU241	Pedagogical Practices	3 credits
	<p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • EDU104 Perspectives on Education • EDC104 Contemporary Education and Technology 	
EDU319	Methods of Teaching Elementary Social Studies	3 credits
	<p>This course is a study of the resources and methods of teaching elementary social studies including geography and culture. Links to literature and the fine arts are part of this exploration of a thematic integration of social studies in classroom activities. A structured field experience is part of this course.</p>	

EDU323	Educational Research Methods	3 credits
	<p>This course focuses on basic research methodology in preparation for the senior tutorial project. It provides a general approach for conducting any basic research project. Through a series of readings and meetings with an education program faculty member, the student will explore the various types of educational research, select and define a research question and complete a literature review. The student will also create an outline for the research paper including the appropriate statistical measures. Tutorial guidelines and Institutional Review processes will be reviewed. Students will meet with the faculty mentor, both in person and online.</p>	
EDU328	Literacy II: Connections to Literature	3 credits
	<p>This course provides a foundation for selecting age, development, and cultural-appropriate literature that engages children and provides links to reading and writing in content areas. Students evaluate authors, illustrators, and study the various types of literature common to early elementary experiences that develop their emotional, social, language, cognitive, and creative talents.</p>	
EDU335	Methods of Teaching Elementary Mathematics	3 credits
	<p>This course is designed to examine and explore recent research developments related to national efforts to reform the teaching and learning of mathematics. Students explore the teaching of mathematics in grades K-8 within the context of child development and learning theory. Research-based curriculum projects are explored in terms of their ability to promote deep conceptual understanding in mathematics. Considerations involved in examining or developing assessment tasks, instruments, and frameworks are addressed in relation to the content taught. Emphasis also is placed on reviewing specific content topics in math to increase the student's won competencies in these disciplines.</p>	
EDU336	Methods of Teaching Elementary Science	3 credits
	<p>This course presents concepts, processes, and skills essential to the elementary school science program. The standards set by the National Science Teachers Association serve as a framework for the course. Inquiry teaching and learning are experienced through research-based national programs.</p>	
EDU400	Data Driven Instruction Decisions	2 credits
	<p>The importance of making decisions based on actual data collected on students now plays a major role in all schools. The data that needs to be reviewed goes beyond standardized test results and needs to include both summative and formative assessment results. The connection between the curriculum and the assessments utilized to assess a student's progress along the curriculum needs to be viewed as a guide to effective educational decision making. Students entering the educational profession need a background in types of assessments and how data collected from such assessments can meet the needs of students in the context of the curriculum.</p>	

EDU409	Differentiated Reading and Writing	3 credits
	This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing to students with disabilities. Strategies to develop conceptual understanding in the content areas are equally important for the beginning and more accomplished learner. Projects include developing lessons that differentiate instructional practice and assessment to help all students achieve.	
EDU411	Early Elementary Curriculum	3 credits
	This course will explore both the theoretical framework and the practical strategies that teachers will utilize as they design learning situations to meet these challenges. Students will learn and apply a variety of techniques for designing lesson and unit plans, integrating curriculum across subject areas, addressing state standards, authentically assessing children, implementing positive classroom management strategies and involving parents in the classroom. Particular attention will be given to the topic of differentiation and the exploration of instructional strategies.	
EDU430	Diverse Family and Community Partnerships	3 credits
	Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.	
EDU431	Assessment and Adaptation	3 credits
	Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.	
EDU431	Assessment and Adaptation	3 credits
	Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.	
EDU490	Integrative Capstone	3 credits
	The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	
	Pre-requisites Complete the following course:	

K-12 Teaching Certification Visual Arts Concentration

[Click Here](#) to view certification

Note: courses are not necessarily taken in numerical order.

Art History courses

ART131	History of World Art I: Prehistory to 1400	3 credits
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This introductory survey focuses on art of the ancient world and the Middle Ages in the West and selected non-Western cultures to 1400 including India, China, and Mesoamerica. It emphasizes the role of art in the formation of a culture, the shifting function of art in different societies and time periods, and the approaches students can use to understand art.

ART132	History of World Art II: 1400 to Present	3 credits
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This introductory survey focuses on Western art from the Renaissance to today and the art of selected non-Western cultures (including Japan, Africa, and Islamic countries) after 1400. It concentrates on the stylistic, technical, and expressive evolution of painting, architecture, and sculpture within specific historical contexts, yet also explores the cross-influences and interaction of non-Western and Western art as defining characteristics of the modern world.

2 course Art History concentration

Studio Courses

ART111	Ceramics I	3 credits
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This studio course provides students with an introduction to ceramic processes and materials. Instruction in beginning wheel-throwing methods augments competency in basic construction and surface application techniques. Projects focus on development of form and surface in ceramics, as well as exposure to historical and contemporary issues specific to the medium. Additional Fee(s): Applied art fee.

ART115	Painting I	3 credits
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This course introduces the student to basic principles of painting and two-dimensional thinking and expression. Drawing skills, color theory, stretcher construction, and a general understanding of visual art concepts accompany each assignment. Additional Fee(s): Applied art fee.

ART117 Drawing I **3 credits**

Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.

ART127 Printmaking I **3 credits**

This course is an introduction to the techniques and aesthetics of graphic media, including dry point, engraving, mezzotint, etching, and aquatint. Additional Fee(s): Applied art fee.

ART141 Media Literacy **3 credits**

This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.

ART490 Integrative Capstone **3 credits**

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

Three additional courses in advanced studio work

One photography course

Education Courses

EDU104 Perspectives on Education **3 credits**

Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee

EDU105	Child Development: Birth Through Grade 4	3 credits
	This course addresses physical, social, cognitive, and moral development from prenatal stages through middle childhood. Students examine child development in the context of social, cultural, instructional settings. Using case studies, the implications of growth and development on instructional planning for effective learning is achieved. Students learn to create environments that are healthy, respectful, supportive and challenging for all children.	
EDU205	ELL Teaching Strategies for Classroom Teachers	3 credits
	This course explores how effective language development results in children who successfully learn to read and can use reading effectively in academic subject areas and to negotiate the world. A major focus of this course is on information and methods for enhancing the literacy and academic experiences of students in grades K-12 classified as English as second language (ELL) students.	
EDU234	Inclusion: Issues and Strategies	3 credits
	This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.	
EDU240	Integrating the Arts	3 credits
	This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of other subjects in the elementary curriculum. Students examine national and PA Academic Standards of the Arts and Humanities in Art, Music, Theater, and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.	
EDU241	Pedagogical Practices	3 credits
	This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • EDU104 Perspectives on Education • EDC104 Contemporary Education and Technology 	
EDU400	Data Driven Instruction Decisions	2 credits
	The importance of making decisions based on actual data collected on students now plays a major role in all schools. The data that needs to be reviewed goes beyond standardized test results and needs to include both summative and formative assessment results. The connection between the curriculum and the assessments utilized to assess a student's	

progress along the curriculum needs to be viewed as a guide to effective educational decision making. Students entering the educational profession need a background in types of assessments and how data collected from such assessments can meet the needs of students in the context of the curriculum.

EDU409	Differentiated Reading and Writing	3 credits
<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing to students with disabilities. Strategies to develop conceptual understanding in the content areas are equally important for the beginning and more accomplished learner. Projects include developing lessons that differentiate instructional practice and assessment to help all students achieve.</p>		
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EDU431	Assessment and Adaptation	3 credits
<p>Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.</p>		
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EDU437	Methods of Teaching Elementary Art	3 credits
<p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to elementary school children. This course contains an embedded field experience of 16 hours in an elementary art classroom. Additional Fee: Field Placement Fee</p>		
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EDU447	Methods of Teaching Secondary Art	3 credits
<p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to secondary students. Students work with host classroom teachers at two different schools or two different levels (middle and high school). Corequisite: EDU415.</p>		
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EDU430	Diverse Family and Community Partnerships	3 credits
<p>Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.</p>		

Secondary Education Certification

[Click here](#) to view the certification.

EDU104	Perspectives on Education Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee	3 credits
EDU205	ELL Teaching Strategies for Classroom Teachers This course explores how effective language development results in children who successfully learn to read and can use reading effectively in academic subject areas and to negotiate the world. A major focus of this course is on information and methods for enhancing the literacy and academic experiences of students in grades K-12 classified as English as second language (ELL) students.	3 credits
EDU234	Inclusion: Issues and Strategies This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.	3 credits
EDU241	Pedagogical Practices This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • EDU104 Perspectives on Education • EDC104 Contemporary Education and Technology 	3 credits
EDU400	Data Driven Instruction Decisions The importance of making decisions based on actual data collected on students now plays a major role in all schools. The data that needs to be reviewed goes beyond standardized test results and needs to include both summative and formative assessment results. The connection between the curriculum and the assessments utilized to assess a student's progress along the curriculum needs to be viewed as a guide to effective educational decision making. Students entering the educational profession need a background in types of assessments and how data collected from such assessments can meet the needs of students in the context of the curriculum.	2 credits
EDU409	Differentiated Reading and Writing This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing to students with disabilities. Strategies to develop conceptual understanding in the content areas are equally important for the beginning and more accomplished learner. Projects include developing lessons that	3 credits

differentiate instructional practice and assessment to help all students achieve.

EDU415	Secondary School Curriculum	3 credits
<p>Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• EDU104 Perspectives on Education		
<hr/>		
EDU430	Diverse Family and Community Partnerships	3 credits
<p>Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.</p>		
<hr/>		
EDU431	Assessment and Adaptation	3 credits
<p>Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.</p>		
<hr/>		
EDU104	Perspectives on Education	3 credits
<p>Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee</p>		
<hr/>		
EDU205	ELL Teaching Strategies for Classroom Teachers	3 credits
<p>This course explores how effective language development results in children who successfully learn to read and can use reading effectively in academic subject areas and to negotiate the world. A major focus of this course is on information and methods for enhancing the literacy and academic experiences of students in grades K-12 classified as English as second language (ELL) students.</p>		
<hr/>		
EDU241	Pedagogical Practices	3 credits
<p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course.</p>		

Pre-requisites Complete any 1 of the following courses:

- EDU104 Perspectives on Education
- EDC104 Contemporary Education and Technology

EDU234	Inclusion: Issues and Strategies	3 credits
<p>This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.</p>		
<hr/>		
EDU241	Pedagogical Practices	3 credits
<p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• EDU104 Perspectives on Education• EDC104 Contemporary Education and Technology		
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EDU400	Data Driven Instruction Decisions	2 credits
<p>The importance of making decisions based on actual data collected on students now plays a major role in all schools. The data that needs to be reviewed goes beyond standardized test results and needs to include both summative and formative assessment results. The connection between the curriculum and the assessments utilized to assess a student's progress along the curriculum needs to be viewed as a guide to effective educational decision making. Students entering the educational profession need a background in types of assessments and how data collected from such assessments can meet the needs of students in the context of the curriculum.</p>		
<hr/>		
EDU409	Differentiated Reading and Writing	3 credits
<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing to students with disabilities. Strategies to develop conceptual understanding in the content areas are equally important for the beginning and more accomplished learner. Projects include developing lessons that differentiate instructional practice and assessment to help all students achieve.</p>		
<hr/>		
EDU415	Secondary School Curriculum	3 credits
<p>Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.</p>		
<p>Pre-requisites Complete the following course:</p>		

- EDU104 Perspectives on Education

EDU430 Diverse Family and Community Partnerships 3 credits

Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.

EDU431 Assessment and Adaptation 3 credits

Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.

2022-2023 Course Catalog

English (BA)

The English major engages students to analyze literary texts within the frames of literary history and theory. English majors learn to make successful and astute arguments about the interrelations between literary texts, literary history, and literary theory orally and in writing. Strong critical thinkers who are trained to articulate difficult concepts in clear language, English majors are prepared for careers requiring intellectual sophistication and clear expression; they are well prepared through seminar coursework and the Integrative Capstone for graduate study in professional or academic areas ranging from literature, law, or public relations to creative writing, teaching, or advertising. Certification in secondary education in English is available. Students may elect to complete a rigorous program of study which leads to a Bachelor of Fine Arts in Creative Writing, culminating in a creative Integrative Capstone. Highly qualified students may also be admitted to the 5-year BFA/M in Creative Writing or to the BA/MAT program in Teaching.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond three years.

Learning Outcomes

Students who successfully complete the English major will be able to:

- distinguish between genres and development of genres
- write a thesis-driven essay; use close textual analysis and appropriate literary terms; execute an argument with clarity and skill; write with no mechanical errors
- evaluate theoretical position of sources including bias
- give formal presentations of critical positions
- apply terms of literary analysis to primary texts in the service of a coherent argument
- explore career and post-graduate possibilities (including professional internships, JET, Americorps, Teach for America, the Peace Corps), as well as to prepare for graduate study in English, Law, Library Science, Professional Writing, or other fields

Chatham University English

Coolidge Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements (BA)

12 courses, including:

ENG100	<p>Introduction to Literary Studies</p> <p>This course focuses on the principles and methods of close literary analysis to develop critical reading and thinking skills. By examining how culture relates to literature, students explore how ethnic heritage contributes to writing; how writers define community and culture; and how strong oral traditions translate into literary forms.</p>	3 credits
ENG204	<p>World Literature</p> <p>A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG207	<p>British Writers I</p> <p>A critical and historical approach to major writers in English during the Anglo-Saxon, medieval, and Renaissance periods, including such representative authors as the Beowulf poet, Chaucer, Spenser, Shakespeare, Donne, and Milton.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG208	<p>British Writers II</p> <p>A critical and historical approach to major writers in English during the Augustan, Romantic, and Victorian periods, including such representative authors as Swift, Pope, Johnson, Wordsworth, Keats, Arnold, Tennyson, and Browning.</p>	3 credits
ENG216W	<p>American Writers I</p> <p>A study of cultural and literary developments in America, beginning with the Puritans and culminating with the writers of the American Renaissance: Emerson, Thoreau, Douglass, Hawthorne, and Melville.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG321W	<p>Shakespeare Survey</p> <p>A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG207 British Writers I • ENG216 American Writers I • ENG216W American Writers I 	3 credits

ENG287	African-American Writers This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnut, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG350W	Seminar in Literary Theory and Scholarly Writing An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG100 Multicultural Literature • ENG100 Introduction to Literary Studies 	3 credits
Upper-level Seminar Elective (3)		
Upper-level Seminar Elective (3)		
INTENG303	Internship - English Internship - English	3 credits
ENG490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG350W Seminar in Literary Theory and Scholarly Writing 	3 credits

Interdisciplinary Major Requirements

8 courses, excluding the Integrative Capstone:

ENG204	<p>World Literature</p> <p>A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG207	<p>British Writers I</p> <p>A critical and historical approach to major writers in English during the Anglo-Saxon, medieval, and Renaissance periods, including such representative authors as the Beowulf poet, Chaucer, Spenser, Shakespeare, Donne, and Milton.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG208	<p>British Writers II</p> <p>A critical and historical approach to major writers in English during the Augustan, Romantic, and Victorian periods, including such representative authors as Swift, Pope, Johnson, Wordsworth, Keats, Arnold, Tennyson, and Browning.</p>	3 credits
ENG216W	<p>American Writers I</p> <p>A study of cultural and literary developments in America, beginning with the Puritans and culminating with the writers of the American Renaissance: Emerson, Thoreau, Douglass, Hawthorne, and Melville.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG321W	<p>Shakespeare Survey</p> <p>A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG207 British Writers I • ENG216 American Writers I • ENG216W American Writers I 	3 credits
ENG287	<p>African-American Writers</p> <p>This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnutt, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the</p>	3 credits

African-American literary tradition.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Introduction to Literary Studies
- ENG105 First-Year Writing

ENG350W	Seminar in Literary Theory and Scholarly Writing	3 credits
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An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Multicultural Literature
- ENG100 Introduction to Literary Studies

1 300-level or above literary seminar

English Minor Requirements

The English minor offers a firm foundation in literary appreciation and analysis. The emphasis on close study of significant texts and thoughtful, imaginative response to their ideas, styles, and cultural contexts helps widen and deepen a reader-writer's worldview and prepare them for effective engagement with diverse communities and communication tasks.

ENG100	Introduction to Literary Studies	3 credits
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This course focuses on the principles and methods of close literary analysis to develop critical reading and thinking skills. By examining how culture relates to literature, students explore how ethnic heritage contributes to writing; how writers define community and culture; and how strong oral traditions translate into literary forms.

3 200-level literature courses from the list below:

ENG200	Frankenstein: Creation of Culture	3 credits
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This course introduces students to Mary Shelley's *Frankenstein* or *The Modern Prometheus*. In addition to studying this primary text, we will examine the reasons for the extensive presence that Frankenstein and his creature occupy in our cultural imagination. To this end, many critical approaches will inform our analysis of the text and mythology of Frankenstein in both literature and film.

ENG204	World Literature	3 credits
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A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.

Pre-requisites Complete any 1 of the following courses:

- ENG100 Introduction to Literary Studies
- ENG105 First-Year Writing

ENG207	<p>British Writers I</p> <p>A critical and historical approach to major writers in English during the Anglo-Saxon, medieval, and Renaissance periods, including such representative authors as the Beowulf poet, Chaucer, Spenser, Shakespeare, Donne, and Milton.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG208	<p>British Writers II</p> <p>A critical and historical approach to major writers in English during the Augustan, Romantic, and Victorian periods, including such representative authors as Swift, Pope, Johnson, Wordsworth, Keats, Arnold, Tennyson, and Browning.</p>	3 credits
ENG213	<p>Special Topics</p> <p>Special Topics</p>	3 credits
ENG216W	<p>American Writers I</p> <p>A study of cultural and literary developments in America, beginning with the Puritans and culminating with the writers of the American Renaissance: Emerson, Thoreau, Douglass, Hawthorne, and Melville.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
ENG220	<p>Gender and Sexuality in Speculative Fiction</p> <p>This course focuses on speculative fiction genres (which include but are not limited to science fiction, fantasy, and futurism). Course materials examine issues of gender and sexuality and how writers working in these genres envision alternative gendered realities through their constructions of language, the body, sensuality, identity, etc.</p>	3 credits
ENG262	<p>Introduction to Women Writers</p> <p>Examining writers from Mary Wollstonecraft to the present, this course delineates the features of a literary tradition specific to women writing in English. Students study novels, essays, and poetry.</p>	3 credits

ENG282	20th-Century African-American Literature This course is a critical study of major African-American writers from the Harlem Renaissance of the 1920s to the present. Although the course concentrates on primary texts, specific attention is paid to contextualizing these works within historical and cultural frameworks. (See also Cultural Studies.)	3 credits
ENG283	The Harlem Renaissance The course explores the literature, politics, and arts of the Harlem Renaissance. This artistic, philosophical, and intellectual movement in New York City's Harlem took place roughly from the early 1920s to the onset of the Depression. Topics to be considered include Modernism, The Jazz Age, and Urban Migration. Specific focus will be placed on the relationship between identity and geography as we consider the effects of migration and urbanization.	3 credits
ENG287	African-American Writers This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnut, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 	3 credits
2 300-level or 400-level literature courses from the list below:		
ENG302	Environmental Children's Fiction and Film This course considers how children's and young adult literature and film can awaken environmental sensibilities in the reader/viewer. Students explore textual representations of flora, fauna, and the elements; the human desire to affiliate with the natural living world; and how fiction and film can promote ecological literacy and awareness. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG303	Food and American Identity Examines literature in multiple genres (e.g. fiction, poetry, creative non-fiction, graphic novel, film/television, and long-form journalism) through the theoretical lens of food studies to understand how writers use food as a cultural object to point to issues of identity including race, class, gender, sexuality, age, ability, and systems of belief. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG100 Multicultural Literature • ENG100 Introduction to Literary Studies Complete any 1 of the following courses: • ENG105 First - Year Communication Seminar • ENG105 First-Year Writing 	3 credits

ENG313	Special Topics Special Topics	3 credits
ENG321W	Shakespeare Survey A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG207 British Writers I • ENG216 American Writers I • ENG216W American Writers I 	3 credits
ENG385	Toni Morrison Seminar This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG413	Special Topics Special Topics	3 credits
ENG425	Bleak Houses: Shifting Landscapes of the English Novel This course will cover the modern European novel through the thematic rubric of "love and lies." The latter theme affords the opportunity to consider fiction not only as a medium of the literary genre of the novel but also as a discourse of self-expression, self-creation, and in the cases of some of our lying protagonists, self-destruction. Students will focus on characters' constructions of "truth" and "lies" as these concepts are informed by characters' emotional positions. At its most ambitious, this focus on the dynamic of intersubjectivity not only provides important insights into the literature we will read but also enhances students' understanding of the interpersonal connections that drive individuals' worldviews and narratives.	3 credits
ENG427	Ethnicity and Place This course focuses on the connection between place and cultural identity in the shaping of a writer's distinctive voice. Influences include ethnic, regional, and linguistic markers, as well as dislocation from the place of origination. Regional focus within the global community may vary by academic term. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits

ENG429	The Literary Cookbook This course examines the contemporary cookbook as a genre of literary nonfiction, influenced by autobiography, memoir, and personal essay. Students will read and write recipe texts through the theoretical lenses of food studies and literary theory to understand how cookbooks function as literature in the popular market and the academy.	3 credits
ENG434	Literature of Fact: Informing the World Working from careful study of the construction of “fact” and “truth” in selected nonfiction genres, students will produce informative digital projects designed to engage a public audience. Readings may come from a variety of fields including humanities, culture, art, natural and social sciences, psychology, history, sustainability, and technology. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG446	Wilderness and Literature Through close reading of poetry and prose, students will explore the relationship between wilderness and literature - both representations of the natural world and what Stanley Kunitz calls "your wilderness . . . the untamed self that you pretend doesn't exist, all that chaos locked behind the closet door, those memories yammering in the dark." Writers examined include: Anne Carson, Mark Doty, Kathleen Hill, and Virginia Woolf.	3 credits
ENG449	Exiles This course will examine the 20th-century condition of exile in relation to its different configurations, from European émigrés to postcolonial subjects to experiences of exile in the United States, to the relation of exile to Diaspora (African, Indian, and Jewish). Students will see how different patterns of movement define subjects variously as exiles, migrants, nomads, and tourists. They also will approach the concept of exile from psychological, geographical, and cultural angles to understand the different uses of the term, its scope, and its limitations.	3 credits
ENG452	Ecofeminist Literature This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG287 African-American Writers • ENG207 British Writers I 	3 credits

ENG480	August Wilson Seminar	3 credits
<p>This course explores the dramatic work of August Wilson, paying particular attention to Wilson's ten-play cycle, which chronicles twentieth century African American life. Wilson's "Pittsburgh cycle" serves as a lens for reading the history of the city decade by decade.</p>		

Writing Minor Requirements

Building on the strengths of Chatham's English and Communication departments, the writing minor enhances students' writing skills in a variety of genres. Featuring courses ranging from academic writing to business writing, this minor prepares students for careers in professional writing (e.g., advertising, public relations, law), supplements majors in business and other fields, and allows students to explore the possibility of becoming professional writers. Designed in conjunction with a faculty member in the English department, individual programs of study require the approval of the department chairperson.

2 content courses in English (e.g., ENG 207 British Writers I, ENG 216W American Writers I)

3 writing-as-subject courses above the 100 level (e.g., ENG 241 Business Writing, COM 251 Newswriting & Editing, COM 260W Practical Public Relations)

1 300-level or above writing-as-subject course (ENG 355 Advanced Writing, COM 360 Advanced Public Relations)

Environmental Writing Minor Requirements

6 courses, including:

ENV116	Global Environmental Challenges	3 credits
<p>This course explores the global implications of environmental issues. It is designed for all students interested in our global environment, one of the most critical issues of our time. The basic premise is that global ecological systems are in decline. This course will not only introduce students to the major issues causing or relating to this ecological decline, but also provide a template for thinking about and acting on solutions. Therefore, the focus is on active, participation-based learning, and students should leave the course ready to create environmental change.</p>		

ENV129	Our Fragile Earth: A Scientific Perspective	3 credits
<p>This course introduces students to a wide range of environmental issues from a scientific perspective. Specific topics vary from year to year, but this course utilizes lectures, discussions, laboratories, guest speakers and field trips to increase knowledge about environmental problems as well as increase scientific knowledge and literacy.</p>		

ENV129L	Our Fragile Earth Lab	1 credits
	This lab offers hands-on opportunity to perform basic environmental lab skills, including water testing, bioassay, and greenhouse experiment protocol. The course may be taken independently as a freestanding environmental lab course. Two hours of laboratory per week. Additional Fee(s): Laboratory fee.	
ENV327	Writing about Environmental Science	3 credits
	This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENG327.	
ENV242	Women and the Global Environment	3 credits
	This course will examine contemporary global environmental issues from a gendered perspective. It will address the following question: How does environmental change impact women's lives, women's health, women's community roles, and how are women offering leadership to address these problems and offer alternative solutions at the global, national, and local levels? The course will examine these issues from a North/South perspective, examining how northern countries' consumption and policies are impacting women in poor and transitional countries. It will also focus on key environmental concerns, from climate change, resource extraction, population, consumption, and toxic contamination.	
One course from the following:		
ENG419	Frontier Women	3 credits
	An impressive number of narratives, novels, diaries, and poems recording the responses of women to the American frontier have become available in recent years. By reading about these frontier experiences, and examining differences in perception and conception based apparently on gender, students will better understand how the frontier functioned within American culture and what "cultural work" these texts accomplished.	
ENG452	Ecofeminist Literature	3 credits
	This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ENG287 African-American Writers • ENG207 British Writers I 	

ENG584	The Environmental Imagination	3 credits
<p>This is a multi-genre course that focuses on the art and craft of nature and environmental writing. Students will read and study contemporary nature and environmental writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>		
ENG585	Travel Writing	3 credits
<p>This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>		

Professional Writing Minor Requirements

This minor is designed for students who wish to develop their writing skills to a professional level. Completion of this program prepares students for the changing requirements of the workplace in a variety of fields, including education, science, the web, advertising and public relations, grant writing, technical writing, political communication, and speech writing.

COM251	News Writing and Editing	3 credits
<p>This is an introduction to journalistic writing and editing for print and the Web. Students will explore lede writing, interviewing and structuring stories in a variety of styles. They also will learn Associated Press style. At the core of the class is an emphasis on ethics and news judgment.</p>		
COM260W	Practical Public Relations	3 credits
<p>Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.</p>		
ENG241	Writing for Professionals	3 credits
<p>Writing for Professionals helps students write clearly and effectively about a variety of subjects in genres related to the workplace. Through writing and reading assignments, students learn about targeting an audience, organizing writing, and developing a professional style. They create documents useful when seeking employment and in the workplace.</p>		

2022-2023 Course Catalog

Environmental Science (BS)

The Environmental Science BS major provides students with an interdisciplinary, scientific perspective to help them develop an evidence-based approach to environmental challenges. Foundational courses in biology, chemistry, ecology, climate science, and geology are coupled with skills-based courses (statistics, GIS) and labs that prepare them for jobs in the public, private, or nonprofit sectors or for further graduate study.

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Demonstrate knowledge of the broad range of environmental science disciplines and their contribution to our understanding of environmental issues
- Apply evidence-based scientific theory, concepts, and processes to propose creative, sustainable, and productive solutions to environmental challenges
- Understand and use analytical approaches to environmental tasks, including statistical, geospatial, and laboratory skill sets
- Effectively identify problems, generate testable hypotheses, design and document repeatable experiments, analyze data, and assess the implications of their findings
- Communicate scientific ideas and data in clear, precise, and understandable written, oral, and graphic formats

Curriculum

Major Requirements

65 credits, including:

SUS201	Integrative Biology	3 credits
	This course will introduce traditional biological concepts from molecules to organisms within an integrative and applied framework. Students will learn the interdisciplinary nature and common approaches of biology through applied topics relevant to sustainability such as human and ecological health, freshwater and marine fisheries, energy sources, and climate dynamics.	

SUS201L	Integrative Biology Lab Laboratory exercises including data collection, small-scale experimentation, data modeling, and simulation will be experienced to complement the material covered in SUS 201. Two hours of laboratory will be held per week at the Eden Hall Campus aquatic science lab. Additional Fee(s): Laboratory fees = \$50.	1 credits
SUS202	Dynamic Earth Systems The earth is a dynamic, evolving system. This course provides an introduction to earth's formation, its materials composition and distribution, and the processes of the lithosphere, atmosphere, hydrosphere, and biosphere that interact to shape surface and subsurface features and conditions. The complex adaptive systems framework will be applied.	3 credits
SUS352	GIS Software - Skills and Applications A Geographic Information Systems (GIS) software is a powerful tool used in a variety of disciplines. Students will gain a foundation of GIS principles and applications using ArcGIS software. Topics covered include data development and management, spatial analysis techniques, communicating data visually and examples of hands-on GIS applications.	3 credits
SUS301	Global Change Science The climate system of Earth is rapidly changing due to complex and interacting phenomena. This course offers an in-depth investigation of the science behind climate change, including a survey of model forecasts. Emphasis will also include the current and projected consequences of climate change on natural resources. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENV116 Global Environmental Challenges • SUS202 Dynamic Earth Systems 	3 credits
BIO224	Botany An introduction to the structure and function of plants. Topics include the evolutionary rise of green plants, plant life cycles and development, plant physiology, plant ecology, and the morphology and taxonomy of vascular plants. The importance of plants for humans is discussed, including their use for food and medicine. Three hours of lecture per week. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism 	3 credits
BIO224L	Lab: Botany Experiments to complement the material presented in BIO224. Four hours of laboratory or field experience per week. Corequisite: BIO224. Additional Fee(s): Laboratory fees. Co-requisites <ul style="list-style-type: none"> • BIO224 Botany 	2 credits

BIO248	<p>Ecology</p> <p>A study of the interrelation between organisms and their environment. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO144 The Organism • BIO143 The Cell <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 Integrative Biology 	3 credits
BIO248LW	<p>Lab: Ecology</p> <p>Experiments to complement the material presented in BIO248. Four hours of laboratory or field experience per week. Corequisite: BIO248. Additional Fee (s): Laboratory fee.</p>	2 credits
BIO303	<p>Applied and Environmental Microbiology</p> <p>This course will focus on the importance of microorganisms in environmental and industrial processes, and the role of scientific research in finding solutions to applied problems. Areas that will be covered include basic microbiology, soil and water microbiology, agricultural and food microbiology, and public health microbiology.</p>	3 credits
BIO303LW	<p>Applied and Environmental Microbiology Lab</p> <p>This course will focus on modern laboratory techniques for the identification, purification, and cultivation of microorganisms at the bench; combined with microbial genomics and applied bioinformatic analyses through participation in authentic scientific research.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • BIO303 Applied and Environmental Microbiology 	2 credits
CHM107	<p>Chemistry I</p> <p>This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109</p>	3 credits
CHM108	<p>Chemistry II</p> <p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CHM105 General Chemistry • CHM107 Chemistry I 	3 credits

CHM109L	Chemistry I Laboratory Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with the lectures in Chemistry 105 and Chemistry 107. Three hours of laboratory per week. Corequisite: CHM 105 or 107. Additional Fee(s): Laboratory fee.	1 credits
CHM110L	Chemistry II Laboratory Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.	1 credits
CHM205	Organic Chemistry I Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 	3 credits
CHM215L	Elementary Organic Laboratory Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.	2 credits
ENV247	Environmental Geology Environmental Geology	3 credits
ENV247L	Environmental Geology Lab Environmental Geology Lab	1 credits
ENV327W	Writing about Environmental Science This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENG327. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENV247 Environmental Geology 	3 credits

SUS4xx - Any 400 Level Sustainability Elective

ENV451 **Soil Science** **3 credits**

Study of soils as natural bodies, media for plant growth, and ecosystem components. Topics include soil morphology and characteristics, composition, formation, conservation, and soil erosion. Physical, chemical, and biological properties of soils are related to the production of plants, the functioning of hydrologic and nutrient cycles, and the protection of environmental quality.

Pre-requisites Complete the following course:

- CHM107 Chemistry I

ENV490 **Integrative Capstone** **3 credits**

The integrative capstone is an extended project centered on a major; projects may include laboratory or fieldwork, creative work in the arts, advocacy work, or independent research; projects may be conducted in a group setting. Integrative capstones in the interdisciplinary major must be approved by both academic programs.

Pre-requisites Complete the following course:

- ENV327W Writing about Environmental Science

SUS350 **Skills for Sustainability Professionals** **2 credits**

This course promotes professional skills development for careers in the field of sustainability including career exploration, networking, job searching, application materials, and interviewing skills. Other topics include practical skills for presentations and small project recognition and development.

Pre-requisites Complete the following course:

- SUS201 Integrative Biology

INTENV303 **Internship - Environmental Studies** **3 credits**

Internship - Environmental Studies

SUS305 **Environmental Toxicology** **3 credits**

To be determined

OR

CHM343**Environmental Chemistry****3 credits**

This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Cross-listed as ENV 443. Three hour lecture per week.

Pre-requisites Complete any 1 of the following courses:

- CHM205 Organic Chemistry I
 - CHM206 Organic Chemistry II
 - CHM209 Inorganic Chemistry
 - CHM215L Elementary Organic Laboratory
 - CHM216L Organic Chemistry Laboratory
-

MTH110**Elementary Statistics****3 credits**

Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.

2022-2023 Course Catalog

Exercise Science (BS)

The exercise science major prepares students for professional practice in a variety of fields including exercise and fitness training, hospital-based and corporate wellness programming as well as preparation for graduate study in exercise physiology, medicine, physical therapy, and other health science programs. Exercise science, as defined by the American College of Sports Medicine, is the study of movement and the associated functional responses and adaptations. The field of exercise science ranges from the study of how organ systems function at the cellular level to enhancing the biomechanical efficiency of the individual. The benefits of exercise have been medically recognized and accepted for their role in preventive medicine and in the rehabilitative process of health and wellbeing. Professionals in exercise science are prepared to examine, evaluate, prescribe, and manage the health and fitness of healthy people across the life span, as well as promote healthy lifestyles and prevention programs for individuals and communities.

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Write well on exams, short papers, and long papers.
- Make oral reports of varying lengths, either alone or as part of a team.
- Exhibit critical thinking when reading texts, lecture supplements, and other materials.
- Recognize and use connections of exercise science to biology, chemistry, mathematics and physics.
- Demonstrate knowledge about the broad core of exercise science.
- Use ethical scientific methods in obtaining and evaluating exercise science data.
- Exhibit skills in such areas as First Aid, CPR, Principles of Nutrition, Exercise Prescription and Safe Exercise Testing.

Learning Outcomes Matrix [PDF]

[» Click here to view more detailed learning outcomes listings for each course.](#)

Chatham University Exercise Science

Falk Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

55 Credits of Required Courses

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits
BIO144	The Organism This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.	3 credits
BIO144L	Lab: The Organism Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.	1 credits

BIO116	Basic Anatomy and Physiology I with Lab This is the first of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week. Enrollment in a school of nursing is required.	4 credits
OR		
BIO201	Anatomy This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism 	3 credits

BIO201L	Lab: Anatomy	2 credits
<p>Laboratory experiments emphasizing comparative anatomy between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism 		

BIO117	Basic Anatomy and Physiology II with lab	4 credits
<p>This is the second of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO116 Basic Anatomy and Physiology I with Lab 		

OR

BIO302	Physiology	3 credits
<p>This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 Anatomy 		

PSY101	General Psychology	3 credits
<p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>		

CHM102	Chemistry in Context One semester lecture course with selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological and environmental issues. Topics include matter, energy, atomic and molecular structure, bonding, reaction chemistry, and radioactivity. Three hours of lecture per week. Not open to majors in biology or chemistry.	3 credits
CHM102L	Chemistry in Context Lab One semester laboratory course to accompany CHM102 Chemistry in Context. Two hours of lab per week. Not open to majors in biology or chemistry.	1 credits
OR		
CHM109L	Chemistry I Laboratory Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with the lectures in Chemistry 105 and Chemistry 107. Three hours of laboratory per week. Corequisite: CHM 105 or 107. Additional Fee(s): Laboratory fee.	1 credits
CHM107	Chemistry I This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109	3 credits

MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.	3 credits
EXS101	Introduction to Exercise Science This course is designed to provide an overview of the field of exercise science as a discipline and profession. Students will be exposed to methods and techniques employed to develop positive attitudes and habits that support an active lifestyle. Topics of health risk factors and wellness will be explored as they specifically relate to exercise. Possible career choices related to this field will also be discussed.	1 credits

<p>EXS201W</p>	<p>Introduction to Critical Research Appraisal</p> <p>This course reviews current research design and statistical techniques needed for a better understanding of peer reviewed literature within exercise science. This course also reviews basic principles of an evidence based approach related to various types of exercise interventions, and common diagnoses and prognoses in the area of public health (e.g., obesity, diabetes). Material presented in lecture will be focused on "real world" data from the current literature.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EXS101 Introduction to Exercise Science 	<p>2 credits</p>
<p>EXS252W</p>	<p>Exercise and Nutrition</p> <p>This course introduces the student to the science of human nutrition and the relationship between health, exercise and food intake. Basic topics of digestion, absorption, metabolism, interaction and functions of nutrients will be covered. Special topics emphasized in this course include optimal nutrition for exercise and sport, energy use during exercise, evaluation of body composition (body fat, muscle mass), development of obesity, weight management, and nutritional factors in planning a successful muscular strength and endurance program.</p>	<p>3 credits</p>
<p>EXS275</p>	<p>Measurement and Evaluation in Human Performance</p> <p>This course provides students with an introduction to measurement and evaluation across all domains in human performance. Common test and measurement techniques in physical fitness, sports performance and motor abilities will be covered and students will practice these techniques on their classmates.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EXS101 Introduction to Exercise Science 	<p>3 credits</p>
<p>EXS302</p>	<p>Principles of Strength and Conditioning</p> <p>Students learn to integrate anatomical and physiological function into a comprehensive strength and conditioning model. Topics include testing, evaluation, exercise techniques, program design, and aerobic endurance training. Students are introduced to facility organization, risk management, and developing a policies and procedure manual.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO201 Anatomy • BIO116 Basic Anatomy and Physiology I with Lab 	<p>3 credits</p>
<p>EXS326</p>	<p>Applied Exercise Physiology I</p> <p>This course provides students with the knowledge of theoretical and applied aspects of exercise physiology with an emphasis on exercise response and exercise testing. An in-depth understanding of how the body responds when exposed to acute bouts of exercise will be provided through lectures and laboratories. Topics discussed will include physiological adaptations of the cardiovascular, respiratory, metabolic, and neuromuscular systems in response to exercise, and assessment of aerobic endurance, muscular fitness and body composition. Three hours of lecture per week. CPR and first aid certifications are required.</p>	<p>3 credits</p>

Pre-requisites Complete any 1 of the following courses:

- BIO201 Anatomy
- BIO116 Basic Anatomy and Physiology I with Lab

EXS326L	Lab: Applied Exercise Physiology I	1 credits
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Experiments to complement the material presented in EXS326. Two hours of laboratory per week. Corequisite: EXS 326. Additional fee(s): Laboratory fee.

Co-requisites

- EXS326 Applied Exercise Physiology I

EXS345	Kinesiology and Movement Science	3 credits
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This course serves as an introduction to kinesiology and movement science of the human body. The student will learn the functional anatomy and biomechanics of the major joints of the human body and the application of kinesiology and biomechanical principles to describe and analyze normal and pathological human movement. Principles and practical application of motor learning, motor control and skill acquisition will also be introduced. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of lecture per week.

Pre-requisites Complete any 1 of the following courses:

- BIO201 Anatomy
- BIO116 Basic Anatomy and Physiology I with Lab

Co-requisites

- EXS345LW Lab: Kinesiology and Movement Science

EXS345LW	Lab: Kinesiology and Movement Science	1 credits
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Experiments to complement the material presented in EXS 345. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of laboratory per week. Corequisite: EXS 345. Additional fee(s): Laboratory fee.

One of the following four:

EXS303	Skeletal Muscle Biochemistry	3 credits
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This upper level undergraduate course will provide students with a comprehensive examination of the biochemical properties of skeletal muscle within the context of human health and disease. Specific topic areas include control of gene expression and protein synthesis, contraction and substrate utilization, non-muscle tissue interactions and exercise training and adaptations.

Pre-requisites Complete any 1 of the following courses:

- BIO116 Basic Anatomy and Physiology I with Lab
- BIO201 Anatomy

EXS321	<p>Prevention and Care of Athletic Injuries</p> <p>This course is designed to provide entry-level knowledge regarding the prevention and treatment of athletic injuries. This includes the recognition of signs and symptoms of injuries and their care that occur during exercise, physical activity, or athletic participation. Students will earn nationally recognized certification in First Aid, CPR, and AED.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO116 Basic Anatomy and Physiology I with Lab • BIO201 Anatomy 	3 credits
EXS360	<p>Exercise and Aging</p> <p>This course will explore the importance of exercise across the lifespan. Theories of aging, exercise prescription for older adults, and exercise for the prevention and management of chronic disease will be discussed. The role of exercise in the compression of morbidity will be emphasized.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO116 Basic Anatomy and Physiology I with Lab • BIO201 Anatomy 	3 credits
EXS385	<p>Pathophysiology</p> <p>This course provides students with the knowledge needed to understand complex disease processes. The pathophysiology of several acute and chronic diseases will be covered with special attention given to the management and treatment applications in the health sciences.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO117 Basic Anatomy and Physiology II with lab • BIO302 Physiology 	3 credits
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EXS490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EXS301W Introduction to Critical Research Appraisal 	3 credits

INTEXS303	Internship - Exercise Science Internship - Exercise Science	3 credits
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OR

ATH512	Clinical Experience in Athletic Training I This course is designed to allow students to review and demonstrate lower extremity and lumbar spine injury evaluations, foundational athletic training skills, modality implementation and emergency management techniques through the completion of a 12-week clinical education experience of approximately 240 clinical hours.	3 credits
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Physician Assistant Graduate School Applicants

Students intending to apply to physician assistant graduate school are advised to take the following courses in addition to the above curriculum:

BIO221	General Microbiology The study of fundamental characteristics of bacteria and related microorganisms, including taxonomy, physiology, and distribution. Three class meetings per week. Pre-requisites Complete all 3 of the following courses: <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism • CHM108 Chemistry II 	3 credits
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PSY251	Human Growth and Development Physical, cognitive, social, and emotional development are studied throughout the life span. Major theories of development are discussed. Applications and examples are presented from applied contexts. Special needs of individuals at various stages throughout the life span are addressed. Does NOT count toward the Psychology major.	3 credits
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BIO119	Medical Terminology This course is designed for students who need a broad coverage of medical terminology and who have little or no background. It includes studies of etymology and human anatomy. There is a special emphasis on clinical applications. Three hours of lecture including media presentations per week.	3 credits
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CHM205	Organic Chemistry I	3 credits
<p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 Chemistry II • CHM110L Chemistry II Laboratory 		

CHM215L	Elementary Organic Laboratory	2 credits
<p>Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>		

Physical Therapy Graduate School Applicants

Students intending to apply to physical therapy graduate school are advised to take the following courses in addition to the above curriculum:

PHY151	Fundamentals of Physics I	3 credits
<p>Introduction to the fundamental concepts of laws and mechanics. This is the first course in an algebra-based sequence. Topics include motion, Newton's Laws, gravity, conservation of energy and momentum, collisions, circular and harmonic motion, and waves.</p>		
PHY155L	Fundamentals of Physics Laboratory I	1 credits
<p>An algebra-based exploration of the experimental techniques of classical physics, with applications to mechanics.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • PHY151 Fundamentals of Physics I 		

OR

PHY251	Principles of Physics I	4 credits
<p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 		

PHY255L	Physics Laboratory I Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.	1 credits

PHY152	Fundamentals of Physics II This is the second course in an algebra-based sequence. Topics include electricity and magnetism, circuits, sound, optics, and relativity. Pre-requisites Complete the following course: • PHY151 Fundamentals of Physics I	3 credits
PHY156L	Fundamentals of Physics Laboratory II An algebra-based exploration of the experimental techniques of classical physics, with applications to electricity, magnetism, sound, and optics. Three hours of laboratory per week. Co-requisite: PHY152. Co-requisites • PHY152 Fundamentals of Physics II	1 credits
OR		
PHY252	Principles of Physics II Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week. Pre-requisites Complete the following course: • PHY251 Principles of Physics I	4 credits
PHY256L	Physics Laboratory II Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.	1 credits

PSY251	Human Growth and Development Physical, cognitive, social, and emotional development are studied throughout the life span. Major theories of development are discussed. Applications and examples are presented from applied contexts. Special needs of individuals at various stages throughout the life span are addressed. Does NOT count toward the Psychology major.	3 credits

Occupational Therapy Graduate School Applicants

Students intending to apply to occupational therapy graduate school are advised to take the following courses in addition to the above curriculum:

PSY251	Human Growth and Development	3 credits
<p>Physical, cognitive, social, and emotional development are studied throughout the life span. Major theories of development are discussed. Applications and examples are presented from applied contexts. Special needs of individuals at various stages throughout the life span are addressed. Does NOT count toward the Psychology major.</p>		
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PSY333	Abnormal Behavior	3 credits
<p>A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• PSY101 General Psychology		

Minor Requirements

21 or 23 Credits

BIO116	Basic Anatomy and Physiology I with Lab	4 credits
<p>This is the first of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week. Enrollment in a school of nursing is required.</p>		
<hr/>		
OR		
BIO201	Anatomy	3 credits
<p>This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none">• BIO143 The Cell• BIO144 The Organism		

BIO201L	Lab: Anatomy	2 credits
<p>Laboratory experiments emphasizing comparative anatomy between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • BIO144 The Organism 		

BIO117	Basic Anatomy and Physiology II with lab	4 credits
<p>This is the second of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO116 Basic Anatomy and Physiology I with Lab 		

OR

BIO302	Physiology	3 credits
<p>This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 Anatomy 		

BIO302L	Physiology Lab	2 credits
<p>Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO201L Lab: Anatomy 		

EXS252	Exercise and Nutrition	3 credits
	<p>This course introduces the student to the science of human nutrition and the relationship between health, exercise and food intake. Basic topics of digestion, absorption, metabolism, interaction and functions of nutrients will be covered. Special topics emphasized in this course include optimal nutrition for exercise and sport, energy use during exercise, evaluation of body composition (body fat, muscle mass), development of obesity, weight management, and nutritional factors in planning a successful muscular strength and endurance program.</p>	
EXS302	Principles of Strength and Conditioning	3 credits
	<p>Students learn to integrate anatomical and physiological function into a comprehensive strength and conditioning model. Topics include testing, evaluation, exercise techniques, program design, and aerobic endurance training. Students are introduced to facility organization, risk management, and developing a policies and procedure manual.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO201 Anatomy • BIO116 Basic Anatomy and Physiology I with Lab 	
EXS326	Applied Exercise Physiology I	3 credits
	<p>This course provides students with the knowledge of theoretical and applied aspects of exercise physiology with an emphasis on exercise response and exercise testing. An in-depth understanding of how the body responds when exposed to acute bouts of exercise will be provided through lectures and laboratories. Topics discussed will include physiological adaptations of the cardiovascular, respiratory, metabolic, and neuromuscular systems in response to exercise, and assessment of aerobic endurance, muscular fitness and body composition. Three hours of lecture per week. CPR and first aid certifications are required.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO201 Anatomy • BIO116 Basic Anatomy and Physiology I with Lab 	
EXS326L	Lab: Applied Exercise Physiology I	1 credits
	<p>Experiments to complement the material presented in EXS326. Two hours of laboratory per week. Corequisite: EXS 326. Additional fee(s): Laboratory fee.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • EXS326 Applied Exercise Physiology I 	

Choose one 300+ EXS Elective:

EXS303	Skeletal Muscle Biochemistry	3 credits
	<p>This upper level undergraduate course will provide students with a comprehensive examination of the biochemical properties of skeletal muscle within the context of human health and disease. Specific topic areas include control of gene expression and protein synthesis, contraction and substrate utilization, non-muscle tissue interactions and exercise training and adaptations.</p>	

Pre-requisites Complete any 1 of the following courses:

- BIO116 Basic Anatomy and Physiology I with Lab
- BIO201 Anatomy

EXS345 Kinesiology and Movement Science

3 credits

This course serves as an introduction to kinesiology and movement science of the human body. The student will learn the functional anatomy and biomechanics of the major joints of the human body and the application of kinesiology and biomechanical principles to describe and analyze normal and pathological human movement. Principles and practical application of motor learning, motor control and skill acquisition will also be introduced. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of lecture per week.

Pre-requisites Complete any 1 of the following courses:

- BIO201 Anatomy
- BIO116 Basic Anatomy and Physiology I with Lab

Co-requisites

- EXS345LW Lab: Kinesiology and Movement Science

EXS321 Prevention and Care of Athletic Injuries

3 credits

This course is designed to provide entry-level knowledge regarding the prevention and treatment of athletic injuries. This includes the recognition of signs and symptoms of injuries and their care that occur during exercise, physical activity, or athletic participation. Students will earn nationally recognized certification in First Aid, CPR, and AED.

Pre-requisites Complete any 1 of the following courses:

- BIO116 Basic Anatomy and Physiology I with Lab
- BIO201 Anatomy

EXS385 Pathophysiology

3 credits

This course provides students with the knowledge needed to understand complex disease processes. The pathophysiology of several acute and chronic diseases will be covered with special attention given to the management and treatment applications in the health sciences.

Pre-requisites Complete any 1 of the following courses:

- BIO117 Basic Anatomy and Physiology II with lab
- BIO302 Physiology

EXS360 Exercise and Aging

3 credits

This course will explore the importance of exercise across the lifespan. Theories of aging, exercise prescription for older adults, and exercise for the prevention and management of chronic disease will be discussed. The role of exercise in the compression of morbidity will be emphasized.

Pre-requisites Complete any 1 of the following courses:

- BIO116 Basic Anatomy and Physiology I with Lab
- BIO201 Anatomy

2022-2023 Course Catalog

Food Studies (BAFS)

The Bachelor of Arts in Food Studies (BAFS) allows students to gain mastery of experiential liberal arts through the lens of food. Students accumulate applied agricultural and culinary knowledge, as well as round out their classroom learning through participation in our signature Food Fellows Experience—a term of cooperative learning and professional development supported by in-person and online guidance from faculty and practitioners.

Learning Outcomes

The Bachelor of Arts in Food Studies program curriculum emphasizes and instills interdisciplinary breadth, experiential learning, community building, communicative competence, and critical thinking capabilities for its students. Learning outcomes of the program include:

1. Students will employ skills from different fields to demonstrate and document contemporary and historic states of food and agriculture.
2. Students will gain basic experience in growing, producing, and cooking food and grasp the specific material competencies related to agriculture and cooking.
3. Students will demonstrate knowledge of the broad range of food studies disciplines and their contribution to our understanding of issues in food and agriculture.
4. Students will be able to use task negotiation, network development, social interaction, and cultural acumen as well as project management in working with collaborators in multiple types of community settings, from business to nonprofit to university members to grassroots groups.
5. Students will employ communication theories, concepts, applied skills, and problem-solving to multiple audiences in a variety of written, oral, and demonstration-focused formats.
6. Students will apply evidence-based theory, concepts, and processes to propose creative, sustainable, and productive solutions to issues in food and agriculture.
7. Students will use analytical approaches and applied skills to food and agricultural tasks.

Curriculum

Minor

16 credits

FST150	Food, Farm & Field	3 credits
	This course explores food, farm, and environment through readings, films, lectures, demonstrations, field trips, and on-farm and kitchen experiences in research and production problems. Activities include presentations on specific topics, group discussions, hands-on lab and field activities, individual and group presentations, field trips, and	

reflection through writing, video, and photography.

FST250	International Cuisine This course explores international cuisine and culture through an interdisciplinary lens. Focusing on culinary history, the course emphasizes knowledge of global culture and cuisine. One of the featured regions of study will align with Chatham's "Global Focus" for the academic year.	3 credits
FST315	Food Access and Policy If food is a basic human right, how do societies create universal access to food? This course explores the ethical basis for making citizens food secure despite global inequality. Major topics include private vs. public solutions and the relationship between food access, gender, cultural appropriateness, nutrition, sustainability, and justice.	3 credits
FST320	Basic Agroecology Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	3 credits
FST320L	Growing Sustainably Lab Through working with Chatham's Eden Hall Farm as well as visiting neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in classes. Topics will include basic principles of soil fertility, biodiversity, greenhouse production, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	1 credits
FST342	Sustainable Production Course explores specific modes of production, agricultural and culinary, with a focus on applied and experiential learning through practical application in a group project. Students focus on farm to kitchen and develop problem solving skills for practical applications, including plant and crop production and culinary product development.	3 credits

2022-2023 Course Catalog

History (BA)

The history program offers courses in the history of regions and major topics in world history as well as skills and project-based courses. These courses provide students with a grounding in the many ways historians have made sense of the world. Understanding how diverse societies, economies, states, and cultures have changed and developed over time is crucial to evaluating and adapting to today's ever-changing world. Throughout their course work, students learn to acquire, organize, analyze, and clearly communicate information and present complex histories to the public in a variety of formats.

The teacher certification program offers certification in secondary social studies teaching. Students interested in this program should see the Certification Coordinator in the Education program for specific requirements.

Learning Outcomes

Students who successfully complete the International Studies major will be able to:

- Demonstrate knowledge of specific facts, concepts, and generalizations regarding past human activity in social, political, intellectual, economic, cultural, geographic and technological spheres.
- Demonstrate recognition of the influence of global forces and identify their connections to local and national developments.
- Demonstrate the ability to explain the connections between past development and contemporary issues.
- Demonstrate ability to extract and interpret information from both primary and secondary sources and identify and critique major arguments and evidence.
- Demonstrate ability to differentiate between fact and interpretation and comprehend their interrelationships.
- Demonstrate ability to identify strengths and weaknesses of arguments in the context of previously learned material.
- Demonstrate ability to formulate hypotheses and research questions based on data.
- Demonstrate ability to locate and evaluate the perspective, quality and accuracy of information resources.
- Demonstrate recognition of the difference between primary and secondary sources.
- Demonstrate ability to clearly communicate knowledge via oral and written means.
- Demonstrate ability to construct simple essay arguments that use historical evidence.

Curriculum

Major Requirements

12 courses, including:

HIS100	Introduction to World History	3 credits
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This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.

HIS102	Introduction to American History	3 credits
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This course examines significant areas in the development of American society from the Colonial period to the present. It focuses particularly on the issues of gender, class, race, religion, politics, and ideology to provide students with the grounding in those areas crucial to understanding today's society.

POL311W	Selected Topics in Social Science Research	3 credits
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The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.

INTHIS303	Internship - History	3 credits
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Internship - History

HIS490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete any 1 of the following courses:

- POL311 Selected Topics in Social Science Research
- POL311W Selected Topics in Social Science Research

One of the following:

HIS200W	Revolutions in Latin America	3 credits
	This course surveys Latin American history from colonization through the present with an emphasis on world history themes. While the legacies of the colonial period will be briefly examined, the course will focus primarily on the nineteenth and twentieth centuries. Global themes will include the spread of European religions among indigenous populations; reverberation of liberal revolutionary ideas in the western hemisphere; the incorporation of Latin American and its populations into the world economy; the influence of race on society; and the spread of Marxism and resulting revolutions.	
HIS201W	Modern Middle East	3 credits
	This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.	
HIS202W	Modern Europe	3 credits
	The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."	
HIS204W	East Asian Studies	3 credits
	An exploration of East Asian geography, history, language, and culture from Zhou Dynasty (ca. 1,000 BCE) to present times. Focus on China, Korea, Japan with reference to neighboring regions and discussion of Taiwan. Emphasis on arts, ideologies, and East Asian cultural sites in Pittsburgh area.	
HIS205W	Africa, Past and Present	3 credits
	This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.	

Electives

4 courses 200-level courses (from list below):

HIS213	Special Topics	3 credits
	Special Topics	

HIS215	Ind & the Working Class in Europe & America This course seeks to understand who built America, under what conditions they labored, and to understand their hopes, dreams, and struggles to create a better future for themselves and their families. The course traces the historical development of the American working class from colonial times to the present. Particular attention is given to the formation of working class political and economic organizations and their impact on American history.	3 credits
HIS216	Rise of the Third World The emergence of Third-Worldism after 1945 is the central historical development of the twentieth century. The Afro-Asian movement namely aimed at recasting the historical initiative away from implacable colonialist powers. This course focuses on the analysis of doctrines and models that have collectively marked the rise of the Third World.	3 credits
HIS220	U.S. Women's History This course explores women's historical experiences in the United States, from Native American women in the pre-colonial era to the present. It investigates the interaction of gender, race, ethnicity, class and sexuality and the ways that these relationships have shaped women's lives socially, economically, and politically.	3 credits
HIS224	The Holocaust This course surveys the destruction of two-thirds of European Jewry during World War II. Through a close reading of primary texts and secondary sources, it explores the foundations and development of Nazi policy toward the Jews. The course documents the reactions of Jews, European peoples and governments, the U.S. people and government, and various churches and political movements.	3 credits
HIS230	History of Social & Political Thought History of Ideas surveys some fundamental normative questions that have been formulated in religion, politics, the Arts, and popular culture from Plato (5th century BC) to the present. It examines principles and methods of political and social thought as they relate to authority, obedience, freedom, equality, and justice.	3 credits
HIS231	History of the British Empire History of the British Empire examines the historical narratives relating to imperialism, ethnocentrism, military aggressions, colonization, acculturation, repression of revolt, technological diffusion, intellectual outreach, and cross-cultural fertilization from the beginning of the reign of Queen Elizabeth I in 1558 to the return of Hong Kong to China in 1997.	3 credits
HIS234	Asian Foodways A strategic survey of Japanese, Chinese/Taiwanese, Korean, and South Asian food ways in their originating contexts and the U.S. Emphasis on anthropological understanding of food ways, cultural studies critique of class, gender, and family dynamics articulated via food, and historical transformations of food culture in response	3 credits

to migration and globalization.

HIS241	History of Islam This course is a historical examination of classical Islamic civilization: its origins, nature, and development. Special attention is given to the religion of Islam and the contributions of Arabs, Persians, and Turks to Islamic civilization. Cross-listed as REL 241.	3 credits
HIS247	American Environmental History Environmental history examines human interaction with their environment over time, a relationship shaped by cultures and political economies. In US history, there have been competing ideologies of capitalist exploitation, conservationism, preservationism, and sustainability. The course will also introduce students to different facets and methods of environmental history.	3 credits
HIS250	History of Christianity This course provides students with a broad historical overview of Christianity, its origins, nature, and development. Students analyze primary sacred and historical texts in addition to historical scholarship on the religion.	3 credits
HIS257	The Sixties, Vietnam & America This course examines the 1960s in America and Vietnam. The course focuses on the war in Vietnam from multiple perspectives including those of Vietnamese and American leaders and ordinary people, examining the roots of the conflict and how it shaped lives and the path of history. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• HIS100 Introduction to World History• HIS102 Introduction to American History• IND108 Gender and Contemporary Social Issues	3 credits
HIS263	Gender and the Family in America In every era of US history, family and gender have been subject to and shaped by other forces in society, such as religion, politics, and the economy. This course traces the history of social construction of family and gender from the antebellum period to the twentieth century. Attention will be paid to changing concepts of family roles, gender roles, and sexuality over time. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• HIS100 Introduction to World History• HIS102 Introduction to American History	3 credits
HIS270	U.S. and the Holocaust This course examines the US and the Holocaust in Europe during the 1930s and 1940s. The primary focus is on developments in the US such as antisemitism, response to the rise of Hitler, knowledge of the Holocaust, and important decisions by national leaders.	3 credits

HIS283	<p>Religious Movements in the Global South</p> <p>This is an interdisciplinary exploration of religious experimentation and innovation in modern African history. The course focuses on enterprises that intensify the production and reinvention of sacred ceremonies, legendary narratives, social norms, ritualistic language, and forms of political participation.</p>	3 credits
2 courses 300-level courses (from list below):		
HIS307	<p>Oral History, Neighborhoods, and Race</p> <p>Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.</p>	3 credits
HIS309	<p>Digital Local History</p> <p>This course examines current methods and technologies used in the production of digital history, with a particular focus on incorporating local history resources into on-line historical media.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • HIS102 Introduction to American History 	3 credits
HIS326	<p>The Arab-israeli Conflict</p> <p>This course examines the origins and issues of conflict between Arabs and Israelis over Palestine. Using primary and secondary sources, arguments of the conflict over several decades are considered, emphasizing the conflict between Palestinians and Israelis but also examining the role of regional and world powers.</p>	3 credits
HIS328	<p>Recent African History and NGO Networks</p> <p>Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity being overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.</p>	3 credits
HIS342	<p>Post/Modern China: Digital Storytelling</p> <p>An examination of Chinese cultural history from early 1900s to early 2000s, via literature and film, with training in digital storytelling techniques. Discussion of this dramatic national narrative framed by political and aesthetic considerations. Our interpretation and transmission of these narratives framed also by ethics and efficacy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First - Year Communication Seminar 	3 credits

HIS351	Asian Pacific Islander America: History and Culture	3 credits
<p>Asian Pacific Islander American is a category well worth unpacking in cultural history contexts from the Western Pennsylvanian to the American and global, in order to grasp these communities' diversity and commonality, as well as struggles, resilience, and creative impact in social formations and in the arts.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 		

ART372	Curating African Art and Artifacts	3 credits
<p>This course explores the rich diversity of art across sub-Sahara Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the collection, including masks, wood sculpture, beadwork, and metalwork.</p>		

Interdisciplinary Major Requirements

8 courses, including:

HIS100	Introduction to World History	3 credits
<p>This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.</p>		

HIS102	Introduction to American History	3 credits
<p>This course examines significant areas in the development of American society from the Colonial period to the present. It focuses particularly on the issues of gender, class, race, religion, politics, and ideology to provide students with the grounding in those areas crucial to understanding today's society.</p>		

1 of the following:

HIS200W	Revolutions in Latin America	3 credits
<p>This course surveys Latin American history from colonization through the present with an emphasis on world history themes. While the legacies of the colonial period will be briefly examined, the course will focus primarily on the nineteenth and twentieth centuries. Global themes will include the spread of European religions among indigenous populations; reverberation of liberal revolutionary ideas in the western hemisphere; the incorporation of Latin American and its populations into the world economy; the influence of race on society; and the spread of Marxism and resulting revolutions.</p>		

HIS201	Modern Middle East	3 credits
<p>This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.</p>		
HIS202W	Modern Europe	3 credits
<p>The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."</p>		
HIS205W	Africa, Past and Present	3 credits
<p>This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.</p>		

1 approved 3-credit internship (INTHIS 303)

2 courses concentrating in American, European or non-Western history

1 300-400 level seminar

1 program elective

Minor Requirements

6 courses, including:

Minor Requirements 6 courses, including:

2 courses from the following:

HIS100	Introduction to World History	3 credits
<p>This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.</p>		

HIS102	Introduction to American History This course examines significant areas in the development of American society from the Colonial period to the present. It focuses particularly on the issues of gender, class, race, religion, politics, and ideology to provide students with the grounding in those areas crucial to understanding today's society.	3 credits
HIS200W	Revolutions in Latin America This course surveys Latin American history from colonization through the present with an emphasis on world history themes. While the legacies of the colonial period will be briefly examined, the course will focus primarily on the nineteenth and twentieth centuries. Global themes will include the spread of European religions among indigenous populations; reverberation of liberal revolutionary ideas in the western hemisphere; the incorporation of Latin American and its populations into the world economy; the influence of race on society; and the spread of Marxism and resulting revolutions.	3 credits
HIS201W	Modern Middle East This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.	3 credits
HIS202W	Modern Europe The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."	3 credits
HIS204W	East Asian Studies An exploration of East Asian geography, history, language, and culture from Zhou Dynasty (ca. 1,000 BCE) to present times. Focus on China, Korea, Japan with reference to neighboring regions and discussion of Taiwan. Emphasis on arts, ideologies, and East Asian cultural sites in Pittsburgh area.	3 credits
HIS205W	Africa, Past and Present This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.	3 credits

200-level Electives

HIS213	Special Topics Special Topics	3 credits
HIS215	Ind & the Working Class in Europe & America This course seeks to understand who built America, under what conditions they labored, and to understand their hopes, dreams, and struggles to create a better future for themselves and their families. The course traces the historical development of the American working class from colonial times to the present. Particular attention is given to the formation of working class political and economic organizations and their impact on American history.	3 credits
HIS216	Rise of the Third World The emergence of Third-Worldism after 1945 is the central historical development of the twentieth century. The Afro-Asian movement namely aimed at recasting the historical initiative away from implacable colonialist powers. This course focuses on the analysis of doctrines and models that have collectively marked the rise of the Third World.	3 credits
HIS220	U.S. Women's History This course explores women's historical experiences in the United States, from Native American women in the pre-colonial era to the present. It investigates the interaction of gender, race, ethnicity, class and sexuality and the ways that these relationships have shaped women's lives socially, economically, and politically.	3 credits
HIS230	History of Social & Political Thought History of Ideas surveys some fundamental normative questions that have been formulated in religion, politics, the Arts, and popular culture from Plato (5th century BC) to the present. It examines principles and methods of political and social thought as they relate to authority, obedience, freedom, equality, and justice.	3 credits
HIS231	History of the British Empire History of the British Empire examines the historical narratives relating to imperialism, ethnocentrism, military aggressions, colonization, acculturation, repression of revolt, technological diffusion, intellectual outreach, and cross-cultural fertilization from the beginning of the reign of Queen Elizabeth I in 1558 to the return of Hong Kong to China in 1997.	3 credits
HIS234	Asian Foodways A strategic survey of Japanese, Chinese/Taiwanese, Korean, and South Asian food ways in their originating contexts and the U.S. Emphasis on anthropological understanding of food ways, cultural studies critique of class, gender, and family dynamics articulated via food, and historical transformations of food culture in response to migration and globalization.	3 credits

HIS241	<p>History of Islam</p> <p>This course is a historical examination of classical Islamic civilization: its origins, nature, and development. Special attention is given to the religion of Islam and the contributions of Arabs, Persians, and Turks to Islamic civilization. Cross-listed as REL 241.</p>	3 credits
HIS247	<p>American Environmental History</p> <p>Environmental history examines human interaction with their environment over time, a relationship shaped by cultures and political economies. In US history, there have been competing ideologies of capitalist exploitation, conservationism, preservationism, and sustainability. The course will also introduce students to different facets and methods of environmental history.</p>	3 credits
HIS250	<p>History of Christianity</p> <p>This course provides students with a broad historical overview of Christianity, its origins, nature, and development. Students analyze primary sacred and historical texts in addition to historical scholarship on the religion.</p>	3 credits
HIS257	<p>The Sixties, Vietnam & America</p> <p>This course examines the 1960s in America and Vietnam. The course focuses on the war in Vietnam from multiple perspectives including those of Vietnamese and American leaders and ordinary people, examining the roots of the conflict and how it shaped lives and the path of history.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • HIS100 Introduction to World History • HIS102 Introduction to American History • IND108 Gender and Contemporary Social Issues 	3 credits
HIS263	<p>Gender and the Family in America</p> <p>In every era of US history, family and gender have been subject to and shaped by other forces in society, such as religion, politics, and the economy. This course traces the history of social construction of family and gender from the antebellum period to the twentieth century. Attention will be paid to changing concepts of family roles, gender roles, and sexuality over time.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • HIS100 Introduction to World History • HIS102 Introduction to American History 	3 credits
HIS270	<p>U.S. and the Holocaust</p> <p>This course examines the US and the Holocaust in Europe during the 1930s and 1940s. The primary focus is on developments in the US such as antisemitism, response to the rise of Hitler, knowledge of the Holocaust, and important decisions by national leaders.</p>	3 credits

HIS283	Religious Movements in the Global South This is an interdisciplinary exploration of religious experimentation and innovation in modern African history. The course focuses on enterprises that intensify the production and reinvention of sacred ceremonies, legendary narratives, social norms, ritualistic language, and forms of political participation.	3 credits
300-level Electives		
HIS301	The Middle East and the United States This course examines the history of the modern Middle East and how U.S. foreign policy has shaped that history from 1945 to the present. It explores official U.S. policy toward the Middle East and the policies of Middle Eastern countries toward the United States, but also tries to understand U.S.-Middle East relations in cultural, economic, and social terms. Prerequisite(s):(s): Any 200-level history course or permission of the instructor.	3 credits
HIS307	Oral History, Neighborhoods, and Race Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.	3 credits
HIS309	Digital Local History This course examines current methods and technologies used in the production of digital history, with a particular focus on incorporating local history resources into on-line historical media. Pre-requisites Complete the following course: • HIS102 Introduction to American History	3 credits
HIS326	The Arab-israeli Conflict This course examines the origins and issues of conflict between Arabs and Israelis over Palestine. Using primary and secondary sources, arguments of the conflict over several decades are considered, emphasizing the conflict between Palestinians and Israelis but also examining the role of regional and world powers.	3 credits
HIS328	Recent African History and NGO Networks Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity being overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.	3 credits

HIS342	<p>Post/Modern China: Digital Storytelling</p> <p>An examination of Chinese cultural history from early 1900s to early 2000s, via literature and film, with training in digital storytelling techniques. Discussion of this dramatic national narrative framed by political and aesthetic considerations. Our interpretation and transmission of these narratives framed also by ethics and efficacy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First - Year Communication Seminar 	3 credits
HIS351	<p>Asian Pacific Islander America: History and Culture</p> <p>Asian Pacific Islander American is a category well worth unpacking in cultural history contexts from the Western Pennsylvanian to the American and global, in order to grasp these communities' diversity and commonality, as well as struggles, resilience, and creative impact in social formations and in the arts.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ART372	<p>Curating African Art and Artifacts</p> <p>This course explores the rich diversity of art across sub-Saharan Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the collection, including masks, wood sculpture, beadwork, and metalwork.</p>	3 credits

2022-2023 Course Catalog

Immersive Media (IMM)

Students gain hands-on experience through intimate studio courses focused on prototyping, and collaborative design. Courses include topics in: 3D modeling, 3D landscapes, architecture, interior design, immersive design research, human centered design, interactive 3d engines, and finally, a capstone internship or co-op experience. Students can customize their education with electives in subjects including screenwriting, interactive animation, sculpture, landscape design, and many more.

Curriculum

Required Courses

ENG105	First-Year Writing	3 credits
	<p>This introduction to college composition covers analytical and argumentative writing, oral presentation, critical reading, information literacy, and academic integrity. The course employs active-learning pedagogy of discussion and dialogue and examines intersections of race, gender, class, ethnicities, and systems of belief through the lens of relevant topics. Students who need additional support with writing skills beyond what is normally covered in the classroom (based on a diagnostic writing exam required before matriculation) will require Supplemental instruction through the PACE Center. Students with transfer credits may meet the requirement for ENG105 with the transfer of a college-level composition course or AP/IB credit.</p>	
SDE101	Strategies for Success in College	1 credits
	<p>SDE101 provides strategies to transition to the college environment, introducing the Chatham community, culture, traditions, and additional relevant topics. All students with first-year standing, regardless of transfer or advanced standing credits, are required to enroll during their first semester. Gateway and transfer students with 12 or more credits are exempt.</p>	
IMM103	Introduction to Immersive Media	3 credits
	<p>Students receive an introduction to 3d modeling, programming, architectural and design theory, and start learning the skills and technology necessary to build immersive experiences.</p>	
IAR214	Digital Visualization I	3 credits
	<p>This course explores design principles related to color theory, typography, branding, web design, print design and layout relative to portfolio design, interior design presentation, communication and development. This course also explores basic human centered design and product design principles as a basis for portfolio and visual design. This course is designed to aid and mentor students in assembling a design portfolio for their</p>	

academic and professional work. Students will learn graphic design techniques for both print and web including basic tools in Adobe Creative Suite.

IMM202	Introduction to Game Design Students learn software and skills to develop interactive experiences using game design, game engine software, design processes and a variety of technology. Projects will focus on using immersive, interactive, and game technologies to develop a range of experiences.	3 credits
IMM215	Programming for Immersive Experiences This course provides an introduction to programming for immersive experiences using real-time software and programming languages. Students will learn interaction scripting, game engine class structures, planning and documenting a significant programming project, learn to work on a programming project in teams, and learn to use industry standard development tools. Pre-requisites Complete the following course: <ul style="list-style-type: none">• IMM103 Immersive Media I	3 credits
IAR260	Fallingwater Studio Residency As a studio residency at Frank Lloyd Wright's Fallingwater, students develop and apply design thinking and visualization through the exploration and application of sustainable strategies, architectural theories, manifestos, and phenomenology. Student outcomes are the culmination of observations, hikes, lectures, reading, discussions, critiques and design charrettes resulting in a final presentation. Pre-requisites Complete the following course: <ul style="list-style-type: none">• IAR219 Drawing and Model Making	3 credits
IMM220	Studio I - 3D Interfaces & User Experience Students learn 3D modeling techniques for environment design, interface and user experience design, and prop design. Using both traditional desktop 3D modeling software and immersive 3D modeling software students will create a variety of 3D models and interfaces for use in immersive experiences. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• IMM202 Immersive Media II• IMM215 Programming for Immersive Experiences	3 credits
CMP202	Introduction to Programming An introduction to programming using C++ for students with no previous computer programming experience. Includes introduction to algorithms and object-oriented programming techniques. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CMP140 Introduction to Computer Science	3 credits

IMM250	<p>Human Centered Design</p> <p>Students will learn the principles of human centered design in order to develop empathy for the people they design for. They will use HCD methods to generate ideas; build prototypes; share their designs; and create a project informed by their designs.</p>	3 credits
IMM240	<p>Immersive Design Seminar</p> <p>The Immersive Design Seminar explores the influence of other design fields and design practices on immersive design while examining current cultural, ethical, and social issues affecting immersive work.</p>	3 credits
IMM371	<p>Studio III: Serious Play</p> <p>Students will examine the uses of immersive media in the fields of education and training, utilizing game design methods and research. They will learn game design, advanced experience design, and instructional design through analysis of existing experiences and a series of practical group projects developing immersive experiences.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IMM220 Studio I - 3D Interfaces & User Experience 	3 credits
IMM406	<p>Studio IV: Prototyping for Advanced Systems</p> <p>Students will be given the opportunity to develop immersive experiences for high-end, experimental, and prototype equipment that is only available to students in this course and later studios. Students will learn how to work with complex immersive equipment systems and early access software in a collaborative studio environment.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IMM220 Studio I - 3D Interfaces & User Experience 	3 credits
IMM455W	<p>Studio V - Ethics and Access</p> <p>This studio course explores the ethical and accessibility issues surrounding immersive technologies through the design and development of immersive experiences that seeks to address these issues.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • IMM220 Studio I - 3D Interfaces & User Experience • IMM310 Studio II - Architecture and Environments 	6 credits
IMM470W	<p>Immersive Design Research</p> <p>This course gives students an opportunity to conduct research using human centered design methods and research methods to craft a plan for their final semester Studio VI course.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IMM220 Studio I - 3D Interfaces & User Experience • IMM250 Human Centered Design 	3 credits

2022-2023 Course Catalog

Interior Architecture (BIA)

The Bachelor of Interior Architecture is a Council for Interior Design Accreditation (CIDA) accredited first professional interior design program consisting of 120 credits. The curriculum includes foundation courses in interior architecture, a dynamic studio sequence, an internship, electives, and an integrative capstone. The Bachelor of Interior Architecture prepares students for practice in an interior design or architecture firm.

Because of the technical requirements needed to run drafting and presentation software programs, students in the BIA program will receive special laptops on a University leasing program. Upon graduation, students are able to keep their laptop.

Students in the BIA program participate in the Fallingwater Residency Program. Typically offered in May after their first year of study, students have a unique opportunity to explore, study and experience Frank Lloyd Wright's masterpiece via a 5-day, 4-night on-site residency.

Learning Outcomes

Upon successful completion of the program, students will be able to:

- effectively locate and gather information associated with both practice and research through a variety of information media
- evaluate the quality and accuracy of information they locate
- extract information from sources associated with practice and research
- evaluate the quality and accuracy of written information
- critically evaluate the executed works of designers
- make informed design decisions based on aesthetics, building technologies, human needs and the health, safety and the welfare of the public
- exhibit a variety of design ideas, approaches and concepts with originality
- transform conceptual design ideas into a detailed solution that takes into account existing building constraints, user needs, cost, building codes and standards, and a program of spaces
- engage in problem solving with respect to design projects of varying type, size and scope
- communicate clearly in writing, in short papers for supporting coursework, concept statements and building programs in the design studios, specifications and schedules for construction documents and contracts and business-related documents
- formulate a point of view and have the ability to articulate and defend it in written form
- express ideas clearly in oral presentations and critiques with classmates, other instructors and professionals from the design community
- formulate a point of view and have the ability to articulate and defend it orally
- demonstrate a sustainable approach to interior design
- think critically and see inquiry as the norm
- identify, research, and solve design challenges with a logical methodology
- demonstrate creative solutions and applied spontaneity

- understand how to conduct and apply research findings
- demonstrate strong professional communication skills and be able to present their design ideas and solutions with confidence
- Students will be globally-conscious interior designers

Chatham University Interior Architecture

Chatham Eastside • Woodland Road • Pittsburgh, PA 15232

Curriculum

Interior Architecture Theory Minor Requirements

IAR105	Environment and Behavior	3 credits
	Intended for interior architecture majors or potential majors, this course introduces students to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.	
IAR202	Theory of Interior Architecture	3 credits
	This course is intended only for majors or potential majors and cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises and projects.	
IAR231	Green & Sustainable Design	3 credits
	Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the Environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.	
IAR232	Color and Textiles Studio I	3 credits
	The first part of this residential studio examines theories of color in relation to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.	
IAR257	20th- and 21st-Century Architecture	3 credits
	This course is designed to relate the impact of architecture on both public and private spaces throughout the twentieth century and provide a view towards the future of architecture in the twenty-first century. The course will guide you through the major styles of architecture of the twentieth century and investigate the socio-historic context of the works	

and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings and the arts and artists of the day.

IAR259	History of Interior Architecture: pre-20th Century	3 credits
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This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.

Major Requirements

27 courses, including

IAR105	Environment and Behavior	3 credits
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Intended for interior architecture majors or potential majors, this course introduces students to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.

IAR202	Theory of Interior Architecture	3 credits
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This course is intended only for majors or potential majors and cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises and projects.

IAR211	Design Fundamentals I	3 credits
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This course covers 2D and 3D foundational principles necessary to understand form to space relationships, organizational typologies and multi-view drawing. Graphic literacy as a language and philosophy for analysis, expression, and presentation of interior architecture is introduced and an understanding of design visualization is developed. Additional fee(s): applied art fee.

IAR214	Digital Visualization I	3 credits
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This course explores design principles related to color theory, typography, branding, web design, print design and layout relative to portfolio design, interior design presentation, communication and development. This course also explores basic human centered design and product design principles as a basis for portfolio and visual design. This course is designed to aid and mentor students in assembling a design portfolio for their academic and professional work. Students will learn graphic design techniques for both print and web including basic tools in Adobe Creative Suite.

IAR215	Digital Visualization II	3 credits
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Students learn the basic computer drafting and drawing skills associated with AutoCAD software. Projects include creating work from scratch and working from existing files. An understanding of drawing layers, detailing, layout, and printing will be presented. Adobe Creative Suite and other rendering software are covered. Additional Fee: Course

Computing Fee.

Pre-requisites Complete the following course:

- IAR219 Drawing and Model Making

IAR218	Building Codes Students learn and apply relevant building codes as they relate to the health and life safety of the occupant. This course addresses energy laws, the principles of universal design and accessible code compliance. Pre-requisites Complete the following course: <ul style="list-style-type: none">• IAR220 Interior Architecture II Complete the following course:• IAR225 Interior Architecture Studio III	3 credits
IAR217	Interior Architecture I This studio introduces students to holistic design analysis, space planning, understanding user experience, and design drawing by examining small to medium scale residential projects. Emphasis is placed on human factors, space planning, spatial understanding, scale, design iteration, materials, furniture, and color with respect to user needs.	3 credits
IAR219	Design Fundamentals II An introduction to interior planning which covers general principles of interior place and its components while working through phases of design from ideation and the basics of space planning to the development and completion of design. Students explore the design process through a series of residential and non-residential exercises.	3 credits
IAR220	Interior Architecture II This studio addresses problem identification and problem solving in the context of small to medium scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs.	3 credits
IAR225	Interior Architecture III This studio addresses problem identification and problem solving in the context of small scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs. Additional Fee: Course Computing fee. Pre-requisites Complete the following course: <ul style="list-style-type: none">• IAR217 Interior Architecture I	3 credits

IAR230	<p>Interior Materials</p> <p>This course is intended only for interior architecture majors or potential majors and addresses architectural materials and finishes. Students learn to select, specify and apply architectural finishes. They create specifications, execute take-offs, and produce cost estimates for interior construction. Manufacturing processes, installation methods, maintenance requirements, code regulations, and testing standards are covered.</p>	3 credits
IAR231	<p>Green & Sustainable Design</p> <p>Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the Environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.</p>	3 credits
IAR261W	<p>History of Interior Architecture: Pre-20th Century</p> <p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>	3 credits
IAR262W	<p>20th and 21st Century Architecture</p> <p>This course is designed to relate the impact of architecture on both public and private spaces throughout the twentieth century and provide a view towards the future of architecture in the twenty-first century. The course will guide you through the major styles of architecture of the twentieth century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings and the arts and artists of the day.</p>	3 credits
IAR310	<p>Digital Visualization III</p> <p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for use in all phases of the design process. Students are introduced to Revit and Sketch-up. Graphic rendering skills are also developed to help students communicate interior spaces Additional Fee: Course Computing fee.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IAR210 2D Visual Communication • IAR215 Digital Visualization II 	3 credits
IAR315	<p>Construction Documents</p> <p>Construction techniques are studied through the production of a set of construction documents. Issues addressed include the selection and assembly of materials, construction methods, detailing of interior finish systems and cabinetry, building codes, and accessibility. Additional Fee(s): Course Computing fee.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • IAR310 Digital Visualization III 	3 credits

- IAR225 Interior Architecture III

IAR316	Portfolio This course will allow Interior Architecture students to solidify their professional portfolio for prospective internships and employment. Students will produce a physical and digital portfolio. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • IAR214 Digital Visualization I 	3 credits
IAR321	Interior Architecture IV This advanced studio addresses concept development, design development, and detailing of medium- and large-scale projects. Emphasis is placed on program analysis, universal design, user needs, space planning, three-dimensional spatial development, design language and composition, materials and assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • IAR225 Interior Architecture II • IAR225 Interior Architecture Studio III 	3 credits
IAR326	Interior Architecture V This 6-credit advanced studio addresses concept development, design development, and detailing of medium-to-large scale projects. Emphasis is placed on program analysis, user needs, space planning, three-dimensional spatial development, design language and composition, materials, assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety.	6 credits
IAR330	Construction Systems & Methods This course provides an overview of architecture building systems including exterior and interior construction methods and terminology. This course provides an overview of environmental control systems, including HVAC, plumbing, fire protection, power distribution, security, and data/voice telecommunication. Emphasis is placed on energy consumption, conservation, human comfort, and health and safety.	3 credits
IAR335	Lighting & Acoustics This course is an introduction to lighting and acoustics. Emphasis is placed on the psychology of lighting, visual comfort criteria, measurement and calculations, available technologies in lighting design, the selection of fixtures, and the application of computer-aided lighting simulation tools. Principles of acoustics, acoustic properties of materials and building systems in relation to building structures, sound transmission between rooms, and design methods in room and building acoustics are also addressed. Additional Fee(s): Course Computing fee. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • IAR230 Interior Materials 	3 credits

IAR441	<p>Environmental/Sustainable Community Service</p> <p>Encouraging environmental stewardship, students are required to participate in an environmental community service project under the supervision of a field leader or faculty member.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IAR215 Digital Visualization II 	1 credits
IAR445	<p>Professional Practice</p> <p>In this course, students are introduced to the specialized services provided by the professional interior designer. Emphasis is placed on office operations and personnel issues, marketing strategies, project management, contract documents, ethics, and the legal and financial aspects of professional practice.</p>	3 credits
IAR470	<p>Immersive Research Design</p> <p>This writing based course introduces research methods and tools as the foundations of evidence based design. This course is a review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods of gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools, culminating in the development of a research paper.</p>	3 credits
INTIAR303	<p>Internship - Interior Architecture</p> <p>Internship - Interior Architecture</p>	3 credits
IAR490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3 credits
IAR260	<p>Fallingwater Studio Residency</p> <p>As a studio residency at Frank Lloyd Wright's Fallingwater, students develop and apply design thinking and visualization through the exploration and application of sustainable strategies, architectural theories, manifestos, and phenomenology. Student outcomes are the culmination of observations, hikes, lectures, reading, discussions, critiques and design charrettes resulting in a final presentation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IAR219 Drawing and Model Making 	3 credits

2022-2023 Course Catalog

International Business (BA)

International Business majors learn how to think globally about the business world. The curriculum engages the student in all functional areas of business and explores how these functions change and adapt by expanding across borders. Through an innovative combination of cross-disciplinary coursework, students develop expertise in language, cultural sensitivity, and an ongoing knowledge of world affairs.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of Bachelor of Arts programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

International Business graduates of bachelor's level programs will be able to:

- Identify and analyze international business problems in the contexts of the structure of international trade and the functioning of the international monetary system
- Design international business strategies taking into account government policies that affect the international trade and financial market conditions
- Demonstrate written communication skills to be used in global business management

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	<p>Financial Accounting Principles I</p> <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
ACT223	<p>Managerial Accounting Principles</p> <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS105	<p>Foundations of Business</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS110	<p>Business Statistics</p> <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS171	<p>Information Systems and Operations</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits
BUS230W	<p>Organizational Behavior</p> <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits
INTBUS303	Internship - Business The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	3 credits
BUS490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS312W Marketing Research • BUS310W Business Analytics: Research Methods 	3 credits

International Business Major

5 courses:

3 required courses:

BUS240	International Business This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.	3 credits
ECN351	International Trade and Finance An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 	3 credits

- ECN101 Principles of Macroeconomics

BUS413 Operations 3 credits

This course introduces students to technical tools and skills essential for problem solving and decision making in operations management. Topics include manufacturing and service operations, inventory optimization, network planning, demand forecasting, transportation planning, product planning, Lean and Six Sigma. Mastery of quantitative methods using spreadsheet modeling is required.

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
- MTH110 Elementary Statistics
- PSY213 Statistics and Research Design

2 courses from the following:

ECN262 Global Environmental Economics 3 credits

This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

ECN330 Global Financial System and the Macro Economy 3 credits

Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.

Pre-requisites Complete all 2 of the following courses:

- ECN101 Principles of Macroeconomics
- ECN102 Principles of Microeconomics

ECN358W Economic Development 3 credits

An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
- ECN101 Principles of Macroeconomics

BUS462	Global Procurement	3 credits
<p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 		

SUS470	Corporate Social Responsibility (CSR)	3 credits
<p>This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.</p>		

Language Requirement: Language proficiency through Intermediate (202) level or fluency in two languages.

Intradisciplinary Major in Two Business Disciplines

Students who wish to do an Intradisciplinary major in two business concentrations must complete the Business Core Major Requirements, plus the following courses.

BUS240	International Business	3 credits
<p>This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.</p>		

ECN351	International Trade and Finance	3 credits
<p>An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics • ECN101 Principles of Macroeconomics 		

2 Approved International Business major electives

Language Requirement: Language proficiency through Intermediate (202) level or fluency in two languages.

Interdisciplinary Major in International Business

Students who wish to do an interdisciplinary major in a business area (Accounting, Economics, International Business, Management, or Marketing) and a non-business discipline will complete the following courses (10 courses, exclusive of Integrative Capstone):

BUS105	Foundations of Business This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	3 credits
BUS110	Business Statistics This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BUS105 Foundations of Business	3 credits
ECN101	Principles of Macroeconomics The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.	3 credits
ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits
ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
BUS240	International Business This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.	3 credits

BUS243	Principles of Marketing This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.	3 credits
BUS310W	Business Research and Analytics This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
ECN351	International Trade and Finance An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics • ECN101 Principles of Macroeconomics 	3 credits
1 Approved course from the following:		
ECN262	Global Environmental Economics This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 	3 credits
BUS395W	Leadership and Management This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized. Pre-requisites Complete the following course:	3 credits

- BUS105 Foundations of Business

ECN330	Global Financial System and the Macro Economy	3 credits
<p>Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none">• ECN101 Principles of Macroeconomics• ECN102 Principles of Microeconomics		
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ECN358W	Economic Development	3 credits
<p>An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• ECN102 Principles of Microeconomics• ECN101 Principles of Macroeconomics		
<hr/>		
BUS413	Operations	3 credits
<p>This course introduces students to technical tools and skills essential for problem solving and decision making in operations management. Topics include manufacturing and service operations, inventory optimization, network planning, demand forecasting, transportation planning, product planning, Lean and Six Sigma. Mastery of quantitative methods using spreadsheet modeling is required.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• BUS110 Business Statistics• MTH110 Elementary Statistics• PSY213 Statistics and Research Design		
<hr/>		
BUS462	Global Procurement	3 credits
<p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• BUS105 Foundations of Business		

Language Requirement: Language proficiency through Intermediate (202) level or fluency in two languages.

2022-2023 Course Catalog

International Studies (BA)

Chatham's major in International Studies emphasizes cultural texts and histories, both classical and contemporary, in combination with practical experience and firsthand intercultural interaction. The core courses draw on humanistic intellectual traditions, in order to develop nuanced understandings of particular texts, topics, and problems within a broad and relevant historical, political, and cultural context. Completion of a regional concentration ensures practical grounding in language, historical and geographical understanding, and experiential learning; it also qualifies a student for financial and programmatic support for study abroad.

Likely career fields for an International Studies major include civic and non-profit work, international outreach, media and communications, and education. Careers in government and business are also achievable, especially if this major is complemented by additional study and experience. The major offers a foundation for graduate work in a variety of fields, including humanities, social sciences, and law.

The International Studies major has a common core of six courses (including Capstone) that combines with an additional six-course (18 credit) regional specialization requirement. Within each regional specialization, students are required to demonstrate mastery through the intermediate level of an appropriate language. Students may count language courses and study abroad toward the 18 credits. If the language requirement is met through testing, other courses may be substituted, with the department chair's approval, to bring the credit total to 18.

Certificates in International Studies: Students not majoring in International Studies may earn certificates in one of five regions (Africa, Asia, Europe, Latin America, the Middle East). These areas (and the certificate requirements) match the 18-credit regional concentrations of the majors (but do not include the core courses required of majors).

Learning Outcomes

Students who successfully complete the International Studies major will be able to:

- Demonstrate a knowledge of specific facts, concepts, and generalizations regarding the geography, history and culture of a particular world region: Africa, Asia, Europe, Latin America, or Middle East
- Demonstrate a knowledge of the economic, historical, political and cultural factors that inform cross-border relations among nation-states and between nation-states and other actors on the international stage
- Demonstrate an intermediate level of fluency in a language appropriate for the chosen regional concentration
- Demonstrate an ability to prepare for, undertake, and reflect on a period of residence abroad
- Locate and evaluate the perspective, quality and accuracy of information resources with particular reference to international affairs
- Demonstrate ability to clearly communicate knowledge via oral and written means

- Demonstrate an ability to construct essay arguments using evidence from the appropriate disciplines

Chatham University International Studies

Falk Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

HIS100	Introduction to World History This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.	3 credits
POL100	Introduction to Comparative Politics Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.	3 credits
OR		
POL104	Introduction to International Relations A survey of significant patterns and trends in 20th-century world politics, modes of conducting relations among nations, instruments for promoting national interests, and current problems of economic and political interdependence.	3 credits
FDT160	World Film History This course presents an overview of the history of film by focusing on key countries, both Western and non-Western, whose film industries have made important contributions to world cinema and/or whose filmmakers have pioneered important film movements. The course places film industries and movements in the context both of cinematic history and history of the societies in question.	3 credits
ENG204	World Literature A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.	3 credits

Pre-requisites Complete any 1 of the following courses:

- ENG100 Introduction to Literary Studies
- ENG105 First-Year Writing

POL311W	Selected Topics in Social Science Research	3 credits
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The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.

HIS490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete any 1 of the following courses:

- POL311 Selected Topics in Social Science Research
- POL311W Selected Topics in Social Science Research

Asia Concentration/Minor Requirements

CST204W	East Asian Studies	3 credits
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An exploration of East Asian geography, history, language, and culture from the Zhou Dynasty (ca. 1,000 BCE) to present times. Focus on China, Korea, Japan with reference to neighboring regions and discussion of Taiwan. Emphasis on arts, ideologies, and East Asian cultural sites in Pittsburgh area.

One (1) 200-level regional elective approved by program director

One (1) 200- or 300-level regional elective approved by program directory

Study Away Experience or internship abroad approved by program advisor (6-12)

An approved Asian language through the intermediate level

Africa Concentration/Minor Requirements

HIS205W Africa, Past and Present**3 credits**

This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.

One (1) 200-level regional elective approved by program director

One (1) 200- or 300-level regional elective approved by program directory

Study Away Experience or internship abroad approved by program advisor (6-12)

An approved African language through the intermediate level

Europe Concentration/Minor Requirements

HIS202W Modern Europe**3 credits**

The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."

One (1) 200-level regional elective approved by program director

One (1) 200- or 300-level regional elective approved by program directory

Study Away Experience or internship abroad approved by program advisor (6-12)

An approved European language through the intermediate level

Latin American Concentration/Minor Requirements

HIS200W Revolutions in Latin America**3 credits**

This course surveys Latin American history from colonization through the present with an emphasis on world history themes. While the legacies of the colonial period will be briefly examined, the course will focus primarily on the nineteenth and twentieth centuries. Global themes will include the spread of European religions among indigenous populations; reverberation of liberal revolutionary ideas in the western hemisphere; the incorporation of Latin American and its populations into the world economy; the influence of race on society; and the spread of Marxism and resulting revolutions.

One (1) 200-level regional elective approved by program director

One (1) 200- or 300-level regional elective approved by program directory

Study Away Experience or internship abroad approved by program advisor (6-12)

Spanish (or other approved language) through the intermediate level

Middle East Concentration/Minor Requirements

HIS201 Modern Middle East

3 credits

This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.

One (1) 200-level regional elective approved by program director

One (1) 200- or 300-level regional elective approved by program directory

Study Away Experience or internship abroad approved by program advisor (6-12)

Arabic (or other approved Middle Eastern language) through the intermediate level

French Minor

In a dynamic and increasingly interactive and interdependent world, a student's education must include a knowledge of other languages and cultures. By teaching language within a framework of intercultural understanding, the modern languages program at Chatham prepares students to experience the richness of other languages, literature, and cultures. Students who declare a minor in French will study the language as well as the cultural contexts of the language.

Requirements (8 courses, 20 credits):

LNG231 Intermediate French Language and Culture I

3 credits

This course is designed for students with one year of college-level French and follows LNG132. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.

LNG231L	Intermediate French Language and Culture I-Lab	1 credits
A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 231.		
LNG232	Intermediate French Language and Culture II	3 credits
This course expands upon content learned in LNG231. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the French-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.		
LNG232L	Intermediate French Language and Culture II-Lab	1 credits
A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 232.		

One (1) grammar and composition course (taken at a partner institution and identified by International Affairs)

Three (3) additional upper-level language and culture electives (two of which may be taken in English to as to accommodate culture and literature courses; can be taken at a partner institution and identified by International Affairs)

German Minor

In a dynamic and increasingly interactive and interdependent world, a student's education must include a knowledge of other languages and cultures. By teaching language within a framework of intercultural understanding, the modern languages program at Chatham prepares students to experience the richness of other languages, literature, and cultures. Students who declare a minor in German will study the language as well as the cultural contexts of the language.

Requirements:

LNG241	Intermediate German Language and Culture I	3 credits
This course is designed for students with one year of college-level German and follows LNG142. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.		

LNG241L	Intermediate German Language and Culture I-Lab	1 credits
A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 241.		

LNG242	Intermediate German Language and Culture II	3 credits
This course expands upon content learned in LNG241. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the German-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.		

LNG242L	Intermediate German Language and Culture II-Lab	1 credits
A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 242.		

One (1) grammar and composition course (taken at a partner institution and identified by International Affairs)

Three (3) additional upper-level language and culture electives (two of which may be taken in English to as to accommodate culture and literature courses; can be taken at a partner institution and identified by International Affairs)

Spanish Minor

In a dynamic and increasingly interactive and interdependent world, a student's education must include a knowledge of other languages and cultures. By teaching language within a framework of intercultural understanding, the modern languages program at Chatham prepares students to experience the richness of other languages, literature, and cultures. Students who declare a minor in Spanish will study the language as well as the cultural contexts of the language.

Requirements:

LNG261	Intermediate Spanish Language and Culture I	3 credits
This course is designed for students with one year of college-level Spanish and follows LNG162. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.		

LNG261L	Intermediate Spanish Language and Culture I-Lab	1 credits
<p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 261.</p>		
LNG262	Intermediate Spanish Language and Culture II	3 credits
<p>This course expands upon content learned in LNG261. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the Spanish-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>		
LNG262L	Intermediate Spanish Language and Culture II-Lab	1 credits
<p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 262.</p>		

One (1) grammar and composition course (taken at a partner institution and identified by International Affairs)

Three (3) additional upper-level language and culture electives (two of which may be taken in English to as to accommodate culture and literature courses; can be taken at a partner institution and identified by International Affairs)

2022-2023 Course Catalog

Management (BA)

The Management major at Chatham cultivates strong leadership and entrepreneurial skills through both academic coursework, and real-world applications. Graduates are prepared to address challenges in talent acquisition, management, and the development of sustainable human capital.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of bachelor's-level programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Management graduates of bachelor's level programs will be able to:

- Understand management concepts and theories
- Analyze business strategies
- Describe ethical challenges and issues of social responsibility (including sustainability) that business leaders and managers may encounter and develop approaches to the challenges posed by such issues.

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	<p>Financial Accounting Principles I</p> <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
ACT223	<p>Managerial Accounting Principles</p> <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS105	<p>Foundations of Business</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS110	<p>Business Statistics</p> <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS171	<p>Information Systems and Operations</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits
BUS230W	<p>Organizational Behavior</p> <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics	3 credits
	Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	
INTBUS303	Internship - Business	3 credits
	The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	
BUS490	Integrative Capstone	3 credits
	The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • BUS312W Marketing Research • BUS310W Business Analytics: Research Methods 	

Management Major

5 courses

3 required courses:

BUS390	Human Resources Management	3 credits
	This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.	
BUS395W	Leadership and Management	3 credits
	This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • BUS105 Foundations of Business 	

ECN331	<p>Managerial Economics</p> <p>This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 	3 credits
Two (2) Approved Electives: choose from list below or get Program Director approval		
BUS240	<p>International Business</p> <p>This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.</p>	3 credits
BUS319	<p>Professional Selling</p> <p>This course introduces students to professional selling best practices. The curriculum addresses strategic planning techniques such as sales performance analytics, customer lifetime value, and social media networking. Tactical execution includes prospecting, lead generation, sales presentation development, and closing a sale. Role playing and sales strategy creation reinforces concepts with practice.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business • BUS243 Principles of Marketing 	3 credits
BUS413	<p>Operations</p> <p>This course introduces students to technical tools and skills essential for problem solving and decision making in operations management. Topics include manufacturing and service operations, inventory optimization, network planning, demand forecasting, transportation planning, product planning, Lean and Six Sigma. Mastery of quantitative methods using spreadsheet modeling is required.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS452	<p>Managing Nonprofit Organizations</p> <p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p>	3 credits

Pre-requisites Complete the following course:

- BUS105 Foundations of Business
Complete all 2 of the following courses:
- SWK102 Introduction to Social Work, Social Justice and Social Issues
- SWK101 Introduction to Sociology

BUS462	Global Procurement	3 credits
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In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

SUS470	Corporate Social Responsibility (CSR)	3 credits
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This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.

Intradisciplinary Major in Two Business Disciplines

Students who wish to do an Intradisciplinary major in two business concentrations must complete the Business Core Major Requirements, plus the following courses.

BUS390	Human Resources Management	3 credits
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This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.

BUS395W	Leadership and Management	3 credits
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This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

ECN331	Managerial Economics	3 credits
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This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

1 Approved Management major elective

Interdisciplinary Major in Management

Students who wish to do an interdisciplinary major in a business area (Accounting, Economics, International Business, Management, or Marketing) and a non-business discipline will complete the following courses (10 courses, exclusive of Integrative Capstone):

ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
BUS105	Foundations of Business This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	3 credits
BUS110	Business Statistics This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BUS105 Foundations of Business	3 credits
BUS230W	Organizational Behavior Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BUS105 Foundations of Business	3 credits

BUS257 Business Law and Business Ethics 3 credits

This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.

BUS310W Business Research and Analytics 3 credits

This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.

Pre-requisites Complete any 1 of the following courses:

- BUS110 Business Statistics
 - MTH110 Elementary Statistics
 - PSY213 Statistics and Research Design
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OR

Prerequisite course for Capstone (xxx490) in the other discipline

BUS390 Human Resources Management 3 credits

This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.

OR

BUS395W Leadership and Management 3 credits

This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business
-

OR

BUS452	Managing Nonprofit Organizations	3 credits
<p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business Complete all 2 of the following courses: • SWK102 Introduction to Social Work, Social Justice and Social Issues • SWK101 Introduction to Sociology 		

ECN102	Principles of Microeconomics	3 credits
<p>Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.</p>		

ECN331	Managerial Economics	3 credits
<p>This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 Principles of Microeconomics 		

1 course from the following:

BUS240	International Business	3 credits
<p>This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.</p>		

BUS357	Strategy and Entrepreneurial Ventures	3 credits
<p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>		

BUS413	Operations <p>This course introduces students to technical tools and skills essential for problem solving and decision making in operations management. Topics include manufacturing and service operations, inventory optimization, network planning, demand forecasting, transportation planning, product planning, Lean and Six Sigma. Mastery of quantitative methods using spreadsheet modeling is required.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS462	Global Procurement <p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
SUS470	Corporate Social Responsibility (CSR) <p>This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.</p>	3 credits

Minor in Applied Management

Core minor Requirements: Successful completion of the following 6 courses.

ACT222	Financial Accounting Principles I <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
BUS105	Foundations of Business <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits

BUS243	Principles of Marketing <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS357	Strategy and Entrepreneurial Ventures <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
BUS319	Professional Selling <p>This course introduces students to professional selling best practices. The curriculum addresses strategic planning techniques such as sales performance analytics, customer lifetime value, and social media networking. Tactical execution includes prospecting, lead generation, sales presentation development, and closing a sale. Role playing and sales strategy creation reinforces concepts with practice.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business • BUS243 Principles of Marketing 	3 credits

BUS390	Human Resources Management <p>This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.</p>	3 credits
OR		
BUS395W	Leadership and Management <p>This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

2022-2023 Course Catalog

Management Information Systems (BA)

The MIS major prepares students to become critical thinkers and innovative designers of contemporary information systems in organizational settings. MIS majors develop both conceptual knowledge and hands-on skills in computing, relational databases, and web design. They will become competent in recognizing opportunities to improve business processes or areas, communicate with stakeholders, and implement and manage information systems projects.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of bachelor's-level programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Management Information Systems graduates of bachelor's level programs will be able to:

- Apply requirements gathering techniques for a proposed information system
- Design a systems development process that includes all the essential phases
- Depict an information system's architecture and processes with industry-standard diagrams

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
ACT223	Managerial Accounting Principles This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting. Pre-requisites Complete the following course: • ACT222 Financial Accounting Principles I	3 credits
BUS105	Foundations of Business This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	3 credits
BUS110	Business Statistics This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy. Pre-requisites Complete the following course: • BUS105 Foundations of Business	3 credits
BUS171	Information Systems and Operations This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.	3 credits
BUS230W	Organizational Behavior Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation. Pre-requisites Complete the following course: • BUS105 Foundations of Business	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits
INTBUS303	Internship - Business The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	3 credits
BUS490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS312W Marketing Research • BUS310W Business Analytics: Research Methods 	3 credits

Management Information Systems Major

5 courses

4 required courses:

BUS317	Systems Analysis and Design This course introduces information systems analysis and design for contemporary organizations, with a focus on developing critical skills in communicating with people as users, analyzing processes, translating needs into information systems requirements, and testing of prototype ideas. Topics also include functional, structural, and behavioral modeling, and Unified Modeling Language (UML). Pre-requisites Complete the following course: <ul style="list-style-type: none"> • CMP283 Database Management Systems 	3 credits
CMP120	Introduction to Programming An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.	3 credits

CMP283 Database Management Systems**3 credits**

This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

ART261 Web Design 1: Code + Aesthetics**3 credits**

This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- FDT210 Studio: Adobe Illustrator
- FDT220 Studio: Adobe Photoshop

1 course from the following:

BUS416 Computer Networking & Telecommunication**3 credits**

This course introduces students to the foundational network technologies for data encoding and transmission. Topics may include telephone network and internet architecture, communication protocols (e.g., HTTP, SMTP), transport protocols (e.g., UDP, TCP), and network protocols (IP), TCP/IP, LANs, WANs, circuit vs. packet switching, network security, and multimedia.

Pre-requisites Complete the following course:

- BUS171 Information Systems and Operations

BUS421 Information and Cybersecurity**3 credits**

This course introduces fundamental issues in information and cybersecurity, with an emphasis on vulnerabilities available to cyber attackers. Students develop conceptual tools for identifying vulnerabilities, assessing threats, analyzing risk, and selecting controls to mitigate risk, and practical skills in implementing security, responding to incidents, and designing systems that prevent cyberattacks.

Pre-requisites Complete the following course:

- BUS171 Information Systems and Operations

BUS450	Advanced Database	3 credits
<p>This course examines advanced topics of database management, including system architecture, complex database objects, building database applications, designing data warehouses, and creating database infrastructure to support Big Data analytics. Students gain hands-on experience through the implementation of database systems, including storage management, query processing, transaction management, and security management.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CMP283 Database Management Systems 		
CMP220	Computer Programming II	3 credits
<p>In this course students learn to develop computer programs using a modern object-oriented language such as java, python, or C#. Topics covered include user-defined classes, inheritance, polymorphism, data structures such as linked lists, stacks, queues, and trees, sorting and searching algorithms, recursion, event-driven programming and exceptions.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CMP120 Introduction to Programming 		

Minor Requirements

6 courses, including:

BUS105	Foundations of Business	3 credits
<p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>		
BUS171	Information Systems and Operations	3 credits
<p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>		
CMP120	Introduction to Programming	3 credits
<p>An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.</p>		

CMP283 Database Management Systems**3 credits**

This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

2 courses from the Management Information Systems major

2022-2023 Course Catalog

Marketing (BA)

Marketing is a unique combination of art and science, creativity and rigor, innovation and fundamentals. Marketing majors obtain the full range of knowledge and skills needed to develop cutting edge marketing strategy and tactics. The program enables students to develop analytical and practical insights for leveraging business growth opportunities across industries and within targeted populations. Special emphasis is placed on ethical marketing practice and adaptation to new technologies, changing consumer preferences, environmental sustainability and a rapidly expanding global economy.

Learning Outcomes

Graduates of bachelor's-level programs in business will be able to demonstrate that they possess academic skills, professional attributes and broad-based and in-depth knowledge of business concepts and functions.

Graduates of bachelor's-level programs in business will be able to:

1. Apply concepts within the core areas of business
2. Apply knowledge of ethical, legal, economic, and global environment to practical business situations and ascertain their impact
3. Apply decision-support tools & technology to make and defend business decisions
4. Demonstrate communication skills appropriate for business settings
5. Contribute to a team environment to achieve a planned goal
6. Analyze the role of motivation and influence in achieving a coordinated goal

In-depth Knowledge for specific majors

Marketing graduates of bachelor's level programs will be able to:

- Conduct comprehensive background analyses including primary and secondary research to determine growth opportunities
- Design marketing strategy to capture competitive advantage within specified industries and target markets
- Develop actionable integrated tactical plans that execute strategic goals and objectives.

Curriculum

Core Requirements

Core Major Requirements for Accounting, Economics, International Business, Management, Management Information Systems, and Marketing:

ACT222	<p>Financial Accounting Principles I</p> <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3 credits
ACT223	<p>Managerial Accounting Principles</p> <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS105	<p>Foundations of Business</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3 credits
BUS110	<p>Business Statistics</p> <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits
BUS171	<p>Information Systems and Operations</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3 credits
BUS230W	<p>Organizational Behavior</p> <p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	3 credits

BUS243	<p>Principles of Marketing</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3 credits
BUS257	<p>Business Law and Business Ethics</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.</p>	3 credits
BUS272	<p>Principles of Finance</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
BUS357	<p>Strategy and Entrepreneurial Ventures</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.</p>	3 credits
ECN101	<p>Principles of Macroeconomics</p> <p>The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.</p>	3 credits

ECN102	Principles of Microeconomics	3 credits
	Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	
INTBUS303	Internship - Business	3 credits
	The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	
BUS490	Integrative Capstone	3 credits
	The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • BUS312W Marketing Research • BUS310W Business Analytics: Research Methods 	

Marketing Major

5 required courses

2 Required courses:

BUS244	Consumer Behavior	3 credits
	The course reviews and evaluates the major theories of consumer behavior from the economics, behavioral sciences, and marketing literatures. The use of consumer research data for marketing decisions is emphasized. Topics include market segmentation, theories of brand choice, family decision making, life cycle theories, and the diffusion of innovations.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • BUS243 Principles of Marketing • BUS243W Principles of Marketing 	

BUS445 Marketing Strategy **3 credits**

This course examines the concepts and processes for gaining competitive advantage in the marketplace. It is designed around a marketing planning approach with an emphasis on strategic analysis and planning. The course takes a hands-on approach toward analyzing markets and market behavior, and matching strategies to changing market conditions.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

3 Approved Electives. Choose from the list below or get Program Director approval

BUS319 Professional Selling **3 credits**

This course introduces students to professional selling best practices. The curriculum addresses strategic planning techniques such as sales performance analytics, customer lifetime value, and social media networking. Tactical execution includes prospecting, lead generation, sales presentation development, and closing a sale. Role playing and sales strategy creation reinforces concepts with practice.

Pre-requisites Complete all 2 of the following courses:

- BUS105 Foundations of Business
- BUS243 Principles of Marketing

BUS350 Advertising and Promotion **3 credits**

This course offers a detailed study of advertising and promotion, including public relations and support media. An integrated marketing communications perspective is emphasized. Advertising and promotion are examined utilizing a range of media outlets, including the internet, television, consumer magazines and professional journals.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

BUS496 Digital Marketing **3 credits**

This course explores digital platforms that transform marketing, including the Internet, search engines, online advertising platforms, and digital analytics platforms. Through participation in real or simulated digital marketing projects, the student will critically apply principles of advertising, marketing analytics, and research methods.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

SUS470 Corporate Social Responsibility (CSR) **3 credits**

This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.

Intradisciplinary Major in Two Business Disciplines

Students who wish to do an Intradisciplinary major in two business concentrations must complete the Business Core Major Requirements, plus the following courses.

BUS244	Consumer Behavior	3 credits
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The course reviews and evaluates the major theories of consumer behavior from the economics, behavioral sciences, and marketing literatures. The use of consumer research data for marketing decisions is emphasized. Topics include market segmentation, theories of brand choice, family decision making, life cycle theories, and the diffusion of innovations.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

BUS445	Marketing Strategy	3 credits
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This course examines the concepts and processes for gaining competitive advantage in the marketplace. It is designed around a marketing planning approach with an emphasis on strategic analysis and planning. The course takes a hands-on approach toward analyzing markets and market behavior, and matching strategies to changing market conditions.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

2 Approved Marketing major electives

Interdisciplinary Major in Marketing

Students who wish to do an interdisciplinary major in a business area (Accounting, Economics, International Business, Management, or Marketing) and a non-business discipline will complete the following courses (10 courses, exclusive of the Integrative Capstone):

ACT222	Financial Accounting Principles I	3 credits
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This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).

BUS105	Foundations of Business	3 credits
	<p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	
BUS110	Business Statistics	3 credits
	<p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 	
BUS243	Principles of Marketing	3 credits
	<p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	
BUS244	Consumer Behavior	3 credits
	<p>The course reviews and evaluates the major theories of consumer behavior from the economics, behavioral sciences, and marketing literatures. The use of consumer research data for marketing decisions is emphasized. Topics include market segmentation, theories of brand choice, family decision making, life cycle theories, and the diffusion of innovations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS243 Principles of Marketing • BUS243W Principles of Marketing 	

BUS310W	Business Research and Analytics	3 credits
	<p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	

OR

Prerequisite course for Capstone (xxx490) in the other discipline

BUS445	Marketing Strategy	3 credits
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This course examines the concepts and processes for gaining competitive advantage in the marketplace. It is designed around a marketing planning approach with an emphasis on strategic analysis and planning. The course takes a hands-on approach toward analyzing markets and market behavior, and matching strategies to changing market conditions.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

ECN102	Principles of Microeconomics	3 credits
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Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.

2 courses from the following:

BUS350	Advertising and Promotion	3 credits
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This course offers a detailed study of advertising and promotion, including public relations and support media. An integrated marketing communications perspective is emphasized. Advertising and promotion are examined utilizing a range of media outlets, including the internet, television, consumer magazines and professional journals.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

BUS357	Strategy and Entrepreneurial Ventures	3 credits
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This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.

BUS395W	Leadership and Management	3 credits
<p>This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 		
BUS496	Digital Marketing	3 credits
<p>This course explores digital platforms that transform marketing, including the Internet, search engines, online advertising platforms, and digital analytics platforms. Through participation in real or simulated digital marketing projects, the student will critically apply principles of advertising, marketing analytics, and research methods.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS243 Principles of Marketing • BUS243W Principles of Marketing 		
SUS470	Corporate Social Responsibility (CSR)	3 credits
<p>This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.</p>		

Minor Requirements

6 courses, including:

Core Minor Requirements

BUS105	Foundations of Business	3 credits
<p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>		
BUS243	Principles of Marketing	3 credits
<p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>		

ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits
3 courses from Marketing major		
BUS244	Consumer Behavior The course reviews and evaluates the major theories of consumer behavior from the economics, behavioral sciences, and marketing literatures. The use of consumer research data for marketing decisions is emphasized. Topics include market segmentation, theories of brand choice, family decision making, life cycle theories, and the diffusion of innovations. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS243 Principles of Marketing • BUS243W Principles of Marketing 	3 credits
BUS319	Professional Selling This course introduces students to professional selling best practices. The curriculum addresses strategic planning techniques such as sales performance analytics, customer lifetime value, and social media networking. Tactical execution includes prospecting, lead generation, sales presentation development, and closing a sale. Role playing and sales strategy creation reinforces concepts with practice. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • BUS105 Foundations of Business • BUS243 Principles of Marketing 	3 credits
BUS350	Advertising and Promotion This course offers a detailed study of advertising and promotion, including public relations and support media. An integrated marketing communications perspective is emphasized. Advertising and promotion are examined utilizing a range of media outlets, including the internet, television, consumer magazines and professional journals. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS243 Principles of Marketing • BUS243W Principles of Marketing 	3 credits
BUS445	Marketing Strategy This course examines the concepts and processes for gaining competitive advantage in the marketplace. It is designed around a marketing planning approach with an emphasis on strategic analysis and planning. The course takes a hands-on approach toward analyzing markets and market behavior, and matching strategies to changing market conditions. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS243 Principles of Marketing 	3 credits

- BUS243W Principles of Marketing

BUS496 Digital Marketing**3 credits**

This course explores digital platforms that transform marketing, including the Internet, search engines, online advertising platforms, and digital analytics platforms. Through participation in real or simulated digital marketing projects, the student will critically apply principles of advertising, marketing analytics, and research methods.

Pre-requisites Complete any 1 of the following courses:

- BUS243 Principles of Marketing
- BUS243W Principles of Marketing

SUS470 Corporate Social Responsibility (CSR)**3 credits**

This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.

2022-2023 Course Catalog

Mathematics (BA/BS)

Mathematics includes an introduction to the principle branches of mathematics: calculus, algebra, probability, statistics, and analysis with emphasis on application of mathematics to the sciences and social sciences. The teacher certification program offers certification in secondary mathematics teaching. Students interested in this program should see the Certification Coordinator in the Education program for specific requirements.

Admission Requirements

- Official transcripts from all colleges and universities attended

Learning Outcomes

Upon successful completion of the major, students will be able to:

- Write well on exams, short paper, long papers and laboratory reports.
- Make poster presentations and oral reports of varying lengths, either alone or as part of a team.
- Exhibit critical thinking when reading texts, lecture supplements, and other materials.
- Prepare a literature review and a bibliography on a topic in mathematics.
- Obtain relevant information from primary sources in a library or online.
- Demonstrate knowledge about the history and broad core of mathematics.
- Recognize and use connections of mathematics to computing and science.
- Use ethical scientific methods in obtaining and evaluating data.
- Demonstrate proper methods in the design of algorithms and in the conduct of research.
- Use Maple, a software package for solving mathematical problems.
- Appreciate the value of proofs, logic, and applications in mathematics.
- Understand mathematical notation.
- Demonstrate skill with numerical, algebraic and calculus problem-solving, and in thinking spatially.

Learning Outcomes Matrix [PDF]

[» Click here to view more detailed learning outcomes listings for each course.](#)

Chatham University Mathematics

Buhl Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements (BA)

43 credits, including:

IND350	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Students prepare a research proposal including literature review, experimental design and methods, budget, timetable, and bibliography. Other topics include professional presentation techniques and research ethics. The student's major department must approve proposals prior to the Tutorial.	2 credits
INTMTH303	Internship - Mathematics Internship - Mathematics	3 credits
MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week.	3 credits
MTH151	Calculus I This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.	4 credits
MTH152	Calculus II This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series. Pre-requisites Complete the following course: <ul style="list-style-type: none">• MTH151 Calculus I	4 credits
MTH215W	Introduction to Proof This course introduces students to the process of reading, understanding and writing rigorous mathematical arguments. Additionally, students will become familiar with computer software used for analyzing math problems and typesetting mathematical documents. This course is a pre-requisite for many upper-level math courses and is intended to help students transition from problem-solving oriented classes such as Calculus into courses focused on understanding and writing proofs. Topics include: basic logic, introductory set theory, functions and relations, and quantifiers. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• MTH151 Calculus I• MTH152 Calculus II	4 credits

MTH221	<p>Linear Algebra</p> <p>Topics include finite dimensional vector spaces, geometry of \mathbb{R}, linear functions, systems of linear equations, and theory of matrices and determinants.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	3 credits
MTH222	<p>Multivariate and Vector Calculus</p> <p>An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
MTH327	<p>Advanced Analysis</p> <p>Foundations for abstract analysis, real and complex number systems, elements of point set topology and limits, continuity, and derivatives.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH222 Multivariate and Vector Calculus • MTH215W Introduction to Proof 	3 credits
OR		
MTH341	<p>Abstract Algebra</p> <p>Introduction to elements of modern abstract algebra, including rings, groups, and fields.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH221 Linear Algebra 	3 credits
MTH490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IND350 Scientific Research Methods 	3 credits

9 additional 200-level or above physics or mathematics credits approved in advance.

Major Requirements (BS)

56 credits, including

CMP202	Introduction to Programming An introduction to programming using C++ for students with no previous computer programming experience. Includes introduction to algorithms and object-oriented programming techniques. Pre-requisites Complete the following course: <ul style="list-style-type: none">• CMP140 Introduction to Computer Science	3 credits
IND350	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Students prepare a research proposal including literature review, experimental design and methods, budget, timetable, and bibliography. Other topics include professional presentation techniques and research ethics. The student's major department must approve proposals prior to the Tutorial.	2 credits
INTMTH303	Internship - Mathematics Internship - Mathematics	3 credits
MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.	3 credits
MTH151	Calculus I This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.	4 credits
MTH152	Calculus II This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series. Pre-requisites Complete the following course: <ul style="list-style-type: none">• MTH151 Calculus I	4 credits

MTH215W	Introduction to Proof <p>This course introduces students to the process of reading, understanding and writing rigorous mathematical arguments. Additionally, students will become familiar with computer software used for analyzing math problems and typesetting mathematical documents. This course is a pre-requisite for many upper-level math courses and is intended to help students transition from problem-solving oriented classes such as Calculus into courses focused on understanding and writing proofs. Topics include: basic logic, introductory set theory, functions and relations, and quantifiers.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH151 Calculus I • MTH152 Calculus II 	4 credits
MTH221	Linear Algebra <p>Topics include finite dimensional vector spaces, geometry of \mathbb{R}, linear functions, systems of linear equations, and theory of matrices and determinants.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	3 credits
MTH222	Multivariate and Vector Calculus <p>An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
MTH241	Differential Equations <p>Introduction to differential equations. Topics include first-order and linear equations, systems of equations, series solutions, and Laplace transform methods with computer-aided study of numerical solutions, and introduction to partial differential equations, and Fourier series. Three hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 Calculus II 	3 credits
MTH327	Advanced Analysis <p>Foundations for abstract analysis, real and complex number systems, elements of point set topology and limits, continuity, and derivatives.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH222 Multivariate and Vector Calculus • MTH215W Introduction to Proof 	3 credits

MTH341	<p>Abstract Algebra</p> <p>Introduction to elements of modern abstract algebra, including rings, groups, and fields.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH221 Linear Algebra 	3 credits
MTH490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • IND350 Scientific Research Methods 	3 credits
PHY251	<p>Principles of Physics I</p> <p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 Calculus I 	4 credits
PHY252	<p>Principles of Physics II</p> <p>Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PHY251 Principles of Physics I 	4 credits

1 additional 200-level or above mathematics courses approved in advance

Minor Requirements

6 courses, including:

MTH151 Calculus I **4 credits**

This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.

MTH152 Calculus II **4 credits**

This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.

Pre-requisites Complete the following course:

- MTH151 Calculus I

MTH221 Linear Algebra **3 credits**

Topics include finite dimensional vector spaces, geometry of \mathbb{R}^n , linear functions, systems of linear equations, and theory of matrices and determinants.

Pre-requisites Complete the following course:

- MTH151 Calculus I

MTH222 Multivariate and Vector Calculus **3 credits**

An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.

Pre-requisites Complete the following course:

- MTH152 Calculus II

1 200-level or above course in mathematics approved in advance.

1 200-level or above course in computing, mathematics, or physics that has not been counted already toward a major or minor.

2022-2023 Course Catalog

Media Arts (Film and Digital Technology, Graphic Design, Photography) (BA)

The Media Arts major provides the opportunity for students to develop creative, conceptual, and technical skills across coursework in film, photography and graphic design – fostering a critical awareness of contemporary, convergent media practices. The major explores the creative tension between individual expression and the social and political forces that shape global, mediated networks within culture. Students are asked to become agents for change within the context of their discipline, asking critical questions of the impact of media in an increasingly global arena. Graduates will be prepared to assume leadership roles in media arts production industries or to pursue graduate programs in related fields.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Admission Requirements

- Portfolio or other examples of work in film and/or digital media

Learning Outcomes

College-Wide Goals & Objectives

This section explains how the Media Arts Major meets the overarching objectives at Chatham University.

1. Information Literacy

- a. Students must effectively locate and gather information for research and media-related analysis through a variety of information media.
- b. Students must be able to properly evaluate the quality of the information and its sources.
- c. Students must utilize their knowledge gathered from various media sources to render well-communicated, designed and conceptualized projects and/or research papers in response to their contextual analysis.

2. Critical Reading

- a. Students must evaluate films, photos and design projects and theories related to critical visual studies through a combination of written and online texts, hand-outs, journal articles, film/video screenings, artist discussions and in-class lectures, conversations and demonstrations.
- b. Students must assess the quality of gathered and presented information as well as its sources.

3. Analytical Thinking

- a. Students must critically investigate and respond to the work of other media artists, filmmakers

and theorists as well as the work of their peers during critique sessions.

- b. Students must look for multidisciplinary relationships between media arts and other fields of research, examining the role of the artist as well as film, video, photo, design and new media works within a broader social context.
- c. Students must exhibit a critical understanding of related technical concerns, representational issues, aesthetic practices, ideas and concepts through original projects and/or papers.

4. Problem Solving

- a. Students must transform critical and analytical research into well-conceptualized projects and informed responses.
- b. Students must be able to move from concept to project actualization.
- c. Students must have a strong understanding of the technical in order to properly troubleshoot and solve technical issues related to a project.

5. Public Written Communication

- a. Students must communicate clearly by writing research or response papers of various lengths, which support coursework requirements.
- b. Students must communicate their conceptual and creative concepts clearly in written project statements.
- c. Students must formulate a point of view and be able to defend it within the written format.

6. Public Oral Communication

- a. Students must communicate ideas clearly in oral presentations.
- b. Students must actively participate in classroom discussions and group critique sessions.
- c. Students must formulate a point of view and be able to defend it orally.

Program-Specific Goals & Objectives

This section explains the discipline-specific goals and objectives of Media Arts

1. Media Literacy, Analysis and Context

- a. Students must have a historical understanding of the media they are using and the ideas they are pursuing in their creative work.
- b. Students must be aware of major theories influencing the photography, graphic design, film, video and new media field.
- c. Students must develop original and well-informed responses to theoretical and critical analysis.
- d. Students must look for interdisciplinary relationships between media arts and other fields of research.

2. Creative Processes

- a. Students must develop and transform original concepts into well-conceptualized projects - demonstrating a competency in project design development.
- b. Students must choose appropriate media for the development of their project and/or idea.
- c. Students must communicate their processes through various stages of development.

3. Technical Fundamentals

- a. Students must have knowledge of the technology they are utilizing for their projects (saving/storing files, various software packages and techniques, hardware, scanning, photo and digital video equipment).
- b. Students must create original projects that draw on their knowledge of the technological form in order to thoroughly investigate relationships between concept development and media used.
- c. Students must properly troubleshoot and solve technical-related problems.

4. Professional Practice

- a. Students must develop projects with an understanding of a diversified audience.
- b. Students must properly document their projects, choosing appropriate forms of media.
- c. Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution or field contribution.
- d. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- e. Students must develop attitudes of professional responsibility and accountability.
- f. Students must develop professional discipline (time-management, organizational skills).

Curriculum

Major Requirements for Media Arts major

ART103	Intro to Visual Culture	3 credits
<p>Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.</p>		
OR		
CST183	Representations of Race and Gender	3 credits
<p>This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.</p>		

FDT161	Introduction to Film, Video and New Media Art This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.	3 credits
ART210	History of Photography This course will examine the relationships between photographs and audiences from the early nineteenth century to the present. A variety of themes will be discussed, including fashion photography, war, fine arts, advertising, portraits, landscapes, and social documentary. Within this structure, we will consider fundamental questions about photography, vision, and meaning, such as finding truth in images and discovering the relationship between image-making and power.	3 credits
Choose any one class:		
ART213	Special Topics Special Topics	3 credits
ART313	Special Topics Special Topics	3 credits
ART230W	Women and Art Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.	3 credits
ART309W	Art + Land: Artists Engage the Environment This course explores interactions between visual artists and the natural environment. It examines 15th- to 17th-century landscape painting and the role of landscape and national identity in the 19th century. It also explores the Earth Art movement that began in the 1960s and current investigations of art and sustainability.	3 credits
ART220	Material Studies Studio Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual	3 credits

concerns - prompting students to articulate and contextualize their artistic practice.

ART320	Material Studies Studio Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ART220 Material Studies Studio	3 credits
ART420	Material Studies Studio Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ART320 Material Studies Studio	3 credits
COM213	Special Topics in Communications Special Topics in Communications	3 credits
COM313	Special Topics Special Topics	3 credits
COM234W	Persuasion This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.	3 credits
COM310W	Environmental Communication This writing-intensive course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• COM106 Media and Society• COM141 Media Literacy	3 credits

FDT213	Special Topics Special Topics	3 credits
FDT313	Special Topics Special Topics	3 credits

FDT300W	Critical Theory Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.	3 credits
ART365	Visual Communication This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.	3 credits
ART490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete the following course: • FDT300W Critical Theory	3 credits
FDT490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.	3 credits

Pre-requisites Complete the following course:

- FDT300W Critical Theory

For additional required coursework for undergraduate students, please review the General Education /Core Requirements section of the catalog.

Graphic Design Concentration

ART117	Drawing I	3 credits
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Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.

ART245	Design Praxis	3 credits
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This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.

ART261	Web Design 1: Code + Aesthetics	3 credits
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This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- FDT210 Studio: Adobe Illustrator
- FDT220 Studio: Adobe Photoshop

ART225	Typography Design Studio	3 credits
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This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.

ART353	Print Design	3 credits
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This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- ART225 Typography Design Studio
- ART245 Design Praxis

ART370 Digital Illustration Methods

3 credits

This course will concentrate on the concept and originality of ideas in digital illustration and will also explore vector and raster-based applications to be used as tools to create digital illustrations. Illustrations created in this course will be applied to design formats and page layouts.

Pre-requisites Complete the following course:

- ART117 Drawing I

ART489 Portfolio

3 credits

This course provides essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Using advanced tools in Adobe InDesign and other applications, students create portfolios in print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered.

Pre-requisites Complete all 2 of the following courses:

- ART245 Design Praxis
- ART321 Typography Design Studio

For courses that require SLR cameras and/or Digital cameras students must provide their own camera. For courses that require video editing equipment, students must provide their own portable hard drive. Please see a faculty member for specifications.

Graphic Design Minor

ART103 Intro to Visual Culture

3 credits

Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.

ART245 Design Praxis

3 credits

This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.

ART225 **Typography Design Studio** **3 credits**

This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.

ART353 **Print Design** **3 credits**

This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- ART225 Typography Design Studio
- ART245 Design Praxis

ART365 **Visual Communication** **3 credits**

This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.

Photography Concentration

ART241 **Lighting Principles** **3 credits**

This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee.

Pre-requisites Complete any 1 of the following courses:

- ART273 Photography I
- COM273 Photography I - B&W Darkroom

ART142 **Photography I : Black and White Darkroom** **3 credits**

This course introduces students to black and white darkroom photography. Students build camera skills while investigating 35mm film fundamentals and wet lab methods. A range of photographic materials and analog techniques are covered. Students study the photograph as a medium for documentation, representation, and expression. Additional Fee(s): Applied laboratory fee.

ART152	Photography II - Introduction to Digital Photography	3 credits
	This course introduces students to the basic aesthetic grammar of digital photography and provides a historical and critical context for looking at and making photographs. Students use cameras with manually adjustable focus and exposure control. Digital darkroom techniques will be explored in Lightroom and Photoshop. Additional Fee(s): Applied laboratory fee.	
ART247	Photography III - Advanced Digital Imaging	3 credits
	This course introduces students to the creation, enhancement, and manipulation of high-quality digital imagery. Adobe Photoshop is the primary tool, and students learn fundamentals of the interface, resolution, masking, layering, compositing, color correction and retouching. Emphasis is on artistry as well as developing technical skills. Additional Fee(s): Applied laboratory fee.	
ART388	Landscape Photography	3 credits
	The landscape is fascinating from a natural and contrived point of view. This course explores the art of taking landscape shots digitally with emphasis on composition, focal points, color, light, movement, time of day, framing, and weather conditions. You will explore a range of image capturing from macro flower shots to vast panoramic points of view from urban and rural subject matter. Several new digital image editing processes will be taught using Photoshop. Additional Fee(s): Applied laboratory fee.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 	
COM374	Documentary and Photojournalism	3 credits
	This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 	
ART483	Event Photography	3 credits
	In this practicum, students gain experience in studio-based and field photography. Students develop a portfolio of portrait and event photography with the potential to be used for the Communique, college publications, and other outlets, with name credits on all published work. Additional Fee(s): Applied laboratory fee.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ART142 Photography I : Black and White Darkroom • ART152 Photography II - Introduction to Digital Photography 	

For courses that require SLR cameras and/or Digital cameras students must provide their own camera. For courses that require video editing equipment, students must provide their own portable hard drive. Please see a faculty member for specifications.

Photography Minor

ART103	Intro to Visual Culture	3 credits
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Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.

ART152	Photography II - Introduction to Digital Photography	3 credits
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This course introduces students to the basic aesthetic grammar of digital photography and provides a historical and critical context for looking at and making photographs. Students use cameras with manually adjustable focus and exposure control. Digital darkroom techniques will be explored in Lightroom and Photoshop. Additional Fee(s): Applied laboratory fee.

Film and Digital Technology Concentration

FDT150	Introduction to Digital Video Production	3 credits
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Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.

FDT350	Intermediate Digital Video Production Studio	3 credits
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Intermediate Digital Video Production further examines methods of production that were presented in the introductory course. Lighting and audio production are introduced to strengthen creative projects. Students synthesize what is provided in the classroom and what is discovered in the field to create meaningful, expressive work.

Pre-requisites Complete any 1 of the following courses:

- ART150 Introduction to Digital Video Production
- COM150 Introduction to Digital Video Production
- FDT150 Introduction to Digital Video Production

FDT450	Advanced Digital Video Production Studio	3 credits
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Advanced Digital Video Production is an intensive studio course that looks at advanced methods of digital video production including highly developed lighting practices, audio recording and mixing, nonlinear editing, and digital effects.

Pre-requisites Complete any 1 of the following courses:

- ART350 Intermediate Digital Video Production
- COM350 Intermediate Digital Video
- FDT350 Intermediate Digital Video Production

Choose Two 200-level courses:

FDT267	Intro to Podcasting	3 credits
	This course explores the growing medium of podcasting and how it effectively communicates stories in the digital realm. This course introduces students to the history and technology behind audio storytelling and trains students to be active podcast listeners. Students will produce a live podcast series from inception to completion.	
FDT225	Female Narration: Race and Gender in Women's Films	3 credits
	This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.	
ART213	Special Topics	3 credits
	Special Topics	
COM213	Special Topics in Communications	3 credits
	Special Topics in Communications	
FDT213	Special Topics	3 credits
	Special Topics	
ART220	Material Studies Studio	3 credits
	Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.	

Choose Two upper level courses:

FDT421	Digital Animation and Compositing	3 credits
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This production course introduces computer animation and visual effects. Students learn the principles, processes, and philosophy of animation with a focus on the design and construction of environments, characters, and time-based motion. Students script, storyboard, design, and produce a short animated digital video. Additional Fee(s): Applied laboratory fee.

Pre-requisites Complete the following course:

- FDT150 Introduction to Digital Video Production

FDT469	Advanced Visual Effects	3 credits
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This course provides an advanced study in developing and executing visual effects for live action films. The course explores the history of special and visual effects by studying practical special effects that can be accomplished in camera, introducing color correction and grading, and mastering the advanced functions of Adobe After Effects as it pertains to live action visual effects.

Pre-requisites Complete the following course:

- FDT421 Digital Animation and Compositing

ART313	Special Topics	3 credits
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Special Topics

COM313	Special Topics	3 credits
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Special Topics

FDT313	Special Topics	3 credits
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Special Topics

Film and Digital Technology Minor

FDT161	Introduction to Film, Video and New Media Art	3 credits
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This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.

FDT150	Introduction to Digital Video Production Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.	3 credits
FDT350	Intermediate Digital Video Production Studio Intermediate Digital Video Production further examines methods of production that were presented in the introductory course. Lighting and audio production are introduced to strengthen creative projects. Students synthesize what is provided in the classroom and what is discovered in the field to create meaningful, expressive work. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ART150 Introduction to Digital Video Production • COM150 Introduction to Digital Video Production • FDT150 Introduction to Digital Video Production 	3 credits
FDT313	Special Topics Special Topics	3 credits

FDT450	Advanced Digital Video Production Studio Advanced Digital Video Production is an intensive studio course that looks at advanced methods of digital video production including highly developed lighting practices, audio recording and mixing, nonlinear editing, and digital effects. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ART350 Intermediate Digital Video Production • COM350 Intermediate Digital Video • FDT350 Intermediate Digital Video Production 	3 credits
OR		
FDT421	Digital Animation and Compositing This production course introduces computer animation and visual effects. Students learn the principles, processes, and philosophy of animation with a focus on the design and construction of environments, characters, and time-based motion. Students script, storyboard, design, and produce a short animated digital video. Additional Fee(s): Applied laboratory fee. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • FDT150 Introduction to Digital Video Production 	3 credits

One Elective:

FDT267	Intro to Podcasting This course explores the growing medium of podcasting and how it effectively communicates stories in the digital realm. This course introduces students to the history and technology behind audio storytelling and trains students to be active podcast listeners. Students will produce a live podcast series from inception to completion.	3 credits
ART241	Lighting Principles This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ART273 Photography I• COM273 Photography I - B&W Darkroom	3 credits
ART213	Special Topics Special Topics	3 credits
COM213	Special Topics in Communications Special Topics in Communications	3 credits
FDT213	Special Topics Special Topics	3 credits
ART313	Special Topics Special Topics	3 credits
COM313	Special Topics Special Topics	3 credits
FDT313	Special Topics Special Topics	3 credits

Film and Digital Technology and Photography Concentration

The Media Arts major provides the opportunity for students to develop creative, conceptual, and technical skills across coursework in film, photography and graphic design – fostering a critical awareness of contemporary, convergent media practices. The major explores the creative tension between individual expression and the social and political forces that shape global, mediated networks within culture. Students are asked to become agents for change within the context of their discipline, asking critical questions of the impact of media in an increasingly global arena. Graduates will be prepared to assume leadership roles in media arts production industries or to pursue graduate programs in related fields. Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Major Requirements

ART103	Intro to Visual Culture	3 credits
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Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.

OR

CST183	Representations of Race and Gender	3 credits
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This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.

FDT161	Introduction to Film, Video and New Media Art	3 credits
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This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.

ART210	History of Photography	3 credits
<p>This course will examine the relationships between photographs and audiences from the early nineteenth century to the present. A variety of themes will be discussed, including fashion photography, war, fine arts, advertising, portraits, landscapes, and social documentary. Within this structure, we will consider fundamental questions about photography, vision, and meaning, such as finding truth in images and discovering the relationship between image-making and power.</p>		
<p>Writing Course - Choose One:</p>		
ART230W	Women and Art	3 credits
<p>Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.</p>		
ART309W	Art + Land: Artists Engage the Environment	3 credits
<p>This course explores interactions between visual artists and the natural environment. It examines 15th- to 17th-century landscape painting and the role of landscape and national identity in the 19th century. It also explores the Earth Art movement that began in the 1960s and current investigations of art and sustainability.</p>		
COM234W	Persuasion	3 credits
<p>This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.</p>		
COM260W	Practical Public Relations	3 credits
<p>Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.</p>		
COM310W	Environmental Communication	3 credits
<p>This writing-intensive course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • COM106 Media and Society • COM141 Media Literacy 		

FDT300W	Critical Theory	3 credits
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Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.

ART365	Visual Communication	3 credits
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This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.

ART490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

OR

FDT490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

Film and Digital Technology Concentration

FDT150	Introduction to Digital Video Production	3 credits
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Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.

FDT350	Intermediate Digital Video Production Studio	3 credits
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Intermediate Digital Video Production further examines methods of production that were presented in the introductory course. Lighting and audio production are introduced to strengthen creative projects. Students synthesize what is provided in the classroom and what is discovered in the field to create meaningful, expressive work.

Pre-requisites Complete any 1 of the following courses:

- ART150 Introduction to Digital Video Production
- COM150 Introduction to Digital Video Production
- FDT150 Introduction to Digital Video Production

FDT450	Advanced Digital Video Production Studio	3 credits
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Advanced Digital Video Production is an intensive studio course that looks at advanced methods of digital video production including highly developed lighting practices, audio recording and mixing, nonlinear editing, and digital effects.

Pre-requisites Complete any 1 of the following courses:

- ART350 Intermediate Digital Video Production
- COM350 Intermediate Digital Video
- FDT350 Intermediate Digital Video Production

200-Level Courses - Choose TWO:

FDT267	Intro to Podcasting	3 credits
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This course explores the growing medium of podcasting and how it effectively communicates stories in the digital realm. This course introduces students to the history and technology behind audio storytelling and trains students to be active podcast listeners. Students will produce a live podcast series from inception to completion.

FDT225	Female Narration: Race and Gender in Women's Films	3 credits
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This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their

own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.

ART213	Special Topics Special Topics	3 credits
COM213	Special Topics in Communications Special Topics in Communications	3 credits
FDT213	Special Topics Special Topics	3 credits
ART220	Material Studies Studio Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.	3 credits

Upper Level Courses - Choose TWO:

FDT421	Digital Animation and Compositing This production course introduces computer animation and visual effects. Students learn the principles, processes, and philosophy of animation with a focus on the design and construction of environments, characters, and time-based motion. Students script, storyboard, design, and produce a short animated digital video. Additional Fee(s): Applied laboratory fee. Pre-requisites Complete the following course: • FDT150 Introduction to Digital Video Production	3 credits
FDT469	Advanced Visual Effects This course provides an advanced study in developing and executing visual effects for live action films. The course explores the history of special and visual effects by studying practical special effects that can be accomplished in camera, introducing color correction and grading, and mastering the advanced functions of Adobe After Effects as it pertains to live action visual effects.	3 credits

Pre-requisites Complete the following course:

- FDT421 Digital Animation and Compositing

ART313	Special Topics Special Topics	3 credits
COM313	Special Topics Special Topics	3 credits
FDT313	Special Topics Special Topics	3 credits

Photography

ART241	Lighting Principles This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ART273 Photography I• COM273 Photography I - B&W Darkroom	3 credits
ART142	Photography I : Black and White Darkroom This course introduces students to black and white darkroom photography. Students build camera skills while investigating 35mm film fundamentals and wet lab methods. A range of photographic materials and analog techniques are covered. Students study the photograph as a medium for documentation, representation, and expression. Additional Fee(s): Applied laboratory fee.	3 credits
ART152	Photography II - Introduction to Digital Photography This course introduces students to the basic aesthetic grammar of digital photography and provides a historical and critical context for looking at and making photographs. Students use cameras with manually adjustable focus and exposure control. Digital darkroom techniques will be explored in Lightroom and Photoshop. Additional Fee(s): Applied laboratory fee.	3 credits
ART247	Photography III - Advanced Digital Imaging This course introduces students to the creation, enhancement, and manipulation of high-quality digital imagery. Adobe Photoshop is the primary tool, and students learn fundamentals of the interface, resolution, masking, layering, compositing, color correction and retouching. Emphasis is on artistry as well as developing technical skills.	3 credits

Additional Fee(s): Applied laboratory fee.

ART388	Landscape Photography	3 credits
<p>The landscape is fascinating from a natural and contrived point of view. This course explores the art of taking landscape shots digitally with emphasis on composition, focal points, color, light, movement, time of day, framing, and weather conditions. You will explore a range of image capturing from macro flower shots to vast panoramic points of view from urban and rural subject matter. Several new digital image editing processes will be taught using Photoshop. Additional Fee(s): Applied laboratory fee.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• ART152 Photography II - Introduction to Digital Photography• FDT150 Introduction to Digital Video Production		
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COM374	Documentary and Photojournalism	3 credits
<p>This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• ART152 Photography II - Introduction to Digital Photography• FDT150 Introduction to Digital Video Production		
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ART483	Event Photography	3 credits
<p>In this practicum, students gain experience in studio-based and field photography. Students develop a portfolio of portrait and event photography with the potential to be used for the Communique, college publications, and other outlets, with name credits on all published work. Additional Fee(s): Applied laboratory fee.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none">• ART142 Photography I : Black and White Darkroom• ART152 Photography II - Introduction to Digital Photography		

Graphic Design and Film and Digital Technology Concentration

The Media Arts major provides the opportunity for students to develop creative, conceptual, and technical skills across coursework in film, photography and graphic design – fostering a critical awareness of contemporary, convergent media practices. The major explores the creative tension between individual expression and the social and political forces that shape global, mediated networks within culture. Students are asked to become agents for change within the context of their discipline, asking critical questions of the impact of media in an increasingly global arena. Graduates will be prepared to assume leadership roles in media arts production industries or to pursue graduate programs in related fields. Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Major Requirements

ART103	Intro to Visual Culture	3 credits
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Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.

OR

CST183	Representations of Race and Gender	3 credits
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This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.

FDT161	Introduction to Film, Video and New Media Art	3 credits
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This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.

ART210	History of Photography	3 credits
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This course will examine the relationships between photographs and audiences from the early nineteenth century to the present. A variety of themes will be discussed, including fashion photography, war, fine arts, advertising, portraits, landscapes, and social documentary. Within this structure, we will consider fundamental questions about photography, vision, and meaning, such as finding truth in images and discovering the relationship between image-making and power.

Writing Courses - Choose ONE:

ART230W	Women and Art Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.	3 credits
ART309W	Art + Land: Artists Engage the Environment This course explores interactions between visual artists and the natural environment. It examines 15th- to 17th-century landscape painting and the role of landscape and national identity in the 19th century. It also explores the Earth Art movement that began in the 1960s and current investigations of art and sustainability.	3 credits
COM234W	Persuasion This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.	3 credits
COM310W	Environmental Communication This writing-intensive course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • COM106 Media and Society • COM141 Media Literacy <p>-----</p>	3 credits
FDT300W	Critical Theory Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.	3 credits
ART365	Visual Communication This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.	3 credits

ART490

Integrative Capstone

3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

OR

FDT490

Integrative Capstone

3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

Graphic Design

ART117

Drawing I

3 credits

Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.

ART245

Design Praxis

3 credits

This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.

ART261	Web Design 1: Code + Aesthetics This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • FDT210 Studio: Adobe Illustrator • FDT220 Studio: Adobe Photoshop 	3 credits
ART225	Typography Design Studio This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.	3 credits
ART353	Print Design This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory fee. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • ART225 Typography Design Studio • ART245 Design Praxis 	3 credits
ART370	Digital Illustration Methods This course will concentrate on the concept and originality of ideas in digital illustration and will also explore vector and raster-based applications to be used as tools to create digital illustrations. Illustrations created in this course will be applied to design formats and page layouts. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ART117 Drawing I 	3 credits
ART489	Portfolio This course provides essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Using advanced tools in Adobe InDesign and other applications, students create portfolios in print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • ART245 Design Praxis • ART321 Typography Design Studio 	3 credits

Film and Digital Technology Concentration

FDT150	Introduction to Digital Video Production	3 credits
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Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.

FDT350	Intermediate Digital Video Production Studio	3 credits
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Intermediate Digital Video Production further examines methods of production that were presented in the introductory course. Lighting and audio production are introduced to strengthen creative projects. Students synthesize what is provided in the classroom and what is discovered in the field to create meaningful, expressive work.

Pre-requisites Complete any 1 of the following courses:

- ART150 Introduction to Digital Video Production
- COM150 Introduction to Digital Video Production
- FDT150 Introduction to Digital Video Production

FDT450	Advanced Digital Video Production Studio	3 credits
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Advanced Digital Video Production is an intensive studio course that looks at advanced methods of digital video production including highly developed lighting practices, audio recording and mixing, nonlinear editing, and digital effects.

Pre-requisites Complete any 1 of the following courses:

- ART350 Intermediate Digital Video Production
- COM350 Intermediate Digital Video
- FDT350 Intermediate Digital Video Production

200 Level Courses - Choose TWO:

FDT267	Intro to Podcasting	3 credits
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This course explores the growing medium of podcasting and how it effectively communicates stories in the digital realm. This course introduces students to the history and technology behind audio storytelling and trains students to be active podcast listeners. Students will produce a live podcast series from inception to completion.

ART241	Lighting Principles	3 credits
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This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee.

Pre-requisites Complete any 1 of the following courses:

- ART273 Photography I
- COM273 Photography I - B&W Darkroom

FDT225	Female Narration: Race and Gender in Women's Films This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.	3 credits
ART213	Special Topics Special Topics	3 credits
COM213	Special Topics in Communications Special Topics in Communications	3 credits
FDT213	Special Topics Special Topics	3 credits
ART220	Material Studies Studio Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.	3 credits

Upper Level Courses - Choose TWO:

COM374	Documentary and Photojournalism This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 	3 credits
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FDT421	Digital Animation and Compositing This production course introduces computer animation and visual effects. Students learn the principles, processes, and philosophy of animation with a focus on the design and construction of environments, characters, and time-based motion. Students script, storyboard, design, and produce a short animated digital video. Additional Fee(s): Applied laboratory fee. Pre-requisites Complete the following course: • FDT150 Introduction to Digital Video Production	3 credits
FDT469	Advanced Visual Effects This course provides an advanced study in developing and executing visual effects for live action films. The course explores the history of special and visual effects by studying practical special effects that can be accomplished in camera, introducing color correction and grading, and mastering the advanced functions of Adobe After Effects as it pertains to live action visual effects. Pre-requisites Complete the following course: • FDT421 Digital Animation and Compositing	3 credits
ART313	Special Topics Special Topics	3 credits
COM313	Special Topics Special Topics	3 credits
FDT313	Special Topics Special Topics	3 credits

Photography and Graphic Design Concentration

The Media Arts major provides the opportunity for students to develop creative, conceptual, and technical skills across coursework in film, photography and graphic design – fostering a critical awareness of contemporary, convergent media practices. The major explores the creative tension between individual expression and the social and political forces that shape global, mediated networks within culture. Students are asked to become agents for change within the context of their discipline, asking critical questions of the impact of media in an increasingly global arena. Graduates will be prepared to assume leadership roles in media arts production industries or to pursue graduate programs in related fields. Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Major Requirements

ART103	Intro to Visual Culture	3 credits
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Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.

OR

CST183	Representations of Race and Gender	3 credits
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This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.

FDT161	Introduction to Film, Video and New Media Art	3 credits
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This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.

ART210	History of Photography	3 credits
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This course will examine the relationships between photographs and audiences from the early nineteenth century to the present. A variety of themes will be discussed, including fashion photography, war, fine arts, advertising, portraits, landscapes, and social documentary. Within this structure, we will consider fundamental questions about photography, vision, and meaning, such as finding truth in images and discovering the relationship between image-making and power.

Writing Courses - Choose ONE:

ART230W	Women and Art	3 credits
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Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.

ART309W	Art + Land: Artists Engage the Environment This course explores interactions between visual artists and the natural environment. It examines 15th- to 17th-century landscape painting and the role of landscape and national identity in the 19th century. It also explores the Earth Art movement that began in the 1960s and current investigations of art and sustainability.	3 credits
COM234W	Persuasion This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.	3 credits
COM260W	Practical Public Relations Students learn the theories, practical writing skills, and strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.	3 credits
COM310W	Environmental Communication This writing-intensive course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • COM106 Media and Society • COM141 Media Literacy <p>-----</p>	3 credits
FDT300W	Critical Theory Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.	3 credits
ART365	Visual Communication This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.	3 credits

ART490

Integrative Capstone

3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

OR

FDT490

Integrative Capstone

3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- FDT300W Critical Theory

Photography

ART241

Lighting Principles

3 credits

This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee.

Pre-requisites Complete any 1 of the following courses:

- ART273 Photography I
- COM273 Photography I - B&W Darkroom

ART142	Photography I : Black and White Darkroom	3 credits
	This course introduces students to black and white darkroom photography. Students build camera skills while investigating 35mm film fundamentals and wet lab methods. A range of photographic materials and analog techniques are covered. Students study the photograph as a medium for documentation, representation, and expression. Additional Fee(s): Applied laboratory fee.	
ART152	Photography II - Introduction to Digital Photography	3 credits
	This course introduces students to the basic aesthetic grammar of digital photography and provides a historical and critical context for looking at and making photographs. Students use cameras with manually adjustable focus and exposure control. Digital darkroom techniques will be explored in Lightroom and Photoshop. Additional Fee(s): Applied laboratory fee.	
ART247	Photography III - Advanced Digital Imaging	3 credits
	This course introduces students to the creation, enhancement, and manipulation of high-quality digital imagery. Adobe Photoshop is the primary tool, and students learn fundamentals of the interface, resolution, masking, layering, compositing, color correction and retouching. Emphasis is on artistry as well as developing technical skills. Additional Fee(s): Applied laboratory fee.	
ART388	Landscape Photography	3 credits
	The landscape is fascinating from a natural and contrived point of view. This course explores the art of taking landscape shots digitally with emphasis on composition, focal points, color, light, movement, time of day, framing, and weather conditions. You will explore a range of image capturing from macro flower shots to vast panoramic points of view from urban and rural subject matter. Several new digital image editing processes will be taught using Photoshop. Additional Fee(s): Applied laboratory fee.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 	
COM374	Documentary and Photojournalism	3 credits
	This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • ART152 Photography II - Introduction to Digital Photography • FDT150 Introduction to Digital Video Production 	

ART483	Event Photography	3 credits
<p>In this practicum, students gain experience in studio-based and field photography. Students develop a portfolio of portrait and event photography with the potential to be used for the Communique, college publications, and other outlets, with name credits on all published work. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ART142 Photography I : Black and White Darkroom • ART152 Photography II - Introduction to Digital Photography 		
Graphic Design		
ART117	Drawing I	3 credits
<p>Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.</p>		
ART245	Design Praxis	3 credits
<p>This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.</p>		
ART261	Web Design 1: Code + Aesthetics	3 credits
<p>This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FDT210 Studio: Adobe Illustrator • FDT220 Studio: Adobe Photoshop 		
ART225	Typography Design Studio	3 credits
<p>This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.</p>		

ART353	<p>Print Design</p> <p>This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ART225 Typography Design Studio • ART245 Design Praxis 	3 credits
ART370	<p>Digital Illustration Methods</p> <p>This course will concentrate on the concept and originality of ideas in digital illustration and will also explore vector and raster-based applications to be used as tools to create digital illustrations. Illustrations created in this course will be applied to design formats and page layouts.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ART117 Drawing I 	3 credits
ART489	<p>Portfolio</p> <p>This course provides essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Using advanced tools in Adobe InDesign and other applications, students create portfolios in print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ART245 Design Praxis • ART321 Typography Design Studio 	3 credits

2022-2023 Course Catalog

Music (BA)

The music program offers a variety of courses in the history, theory, and performance of music, including cross-cultural and technological aspects. Performance is encouraged through numerous student recitals, the Integrative Capstone, and participation in the Chatham College Choir. Students have opportunities to study privately with members of the Pittsburgh Symphony Orchestra and on occasion may present public performances with their teachers. The student majoring in music also may choose to focus on other aspects of the discipline, including creative projects. The cross-disciplinary opportunities afforded by the College curriculum allow for imaginative program design.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Admission Requirements

Learning Outcomes

Program-Specific Goals & Objectives

This section explains the discipline-specific goals and objectives of the Music program.

1. General musicianship (all concentrations)

Students will acquire:

- a. The ability to hear, identify and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre, texture.
- b. An understanding of and the ability to read and realize musical notation.
- c. An understanding of compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- d. An acquaintance with a wide selection of musical literature, the principal eras, genres, and cultural sources.
- e. The ability to develop and defend musical judgments.

2. Performance

Students will acquire:

- a. Technical skills requisite for artistic self-expression in at least one major performance area at a level

- appropriate for the particular music concentration.
- b. An overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
 - c. The ability to read at sight with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for the particular concentration.
 - d. Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation. Rehearsal and conducting skills are required as appropriate to the particular music concentration.
 - e. Keyboard competency.
 - f. Growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences. Ensembles should be varied both in size and nature.

3. Musicianship skills and analysis

Students will acquire:

- a. An understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation.
- b. Sufficient understand of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations.
- c. The ability to place music in historical, cultural, and stylistic contexts.

4. Composition and improvisation

Students must acquire a rudimentary capacity to create derivative or original music both extemporaneously and in written form; for examples, the imitation of various musical styles, improvisation on pre-existing materials, the creation of original compositions, experimentation with various sound sources, and manipulating the common elements in non-traditional ways.

5. History and Repertory

Students must acquire basic knowledge of music history and repertoires through the present time, including study and experience of musical language and achievement in addition to that of the primary culture encompassing the area of specialization.

6. Technology

Students must acquire the ability to use technologies current to their area of specialization.

7. Synthesis

While synthesis is a lifelong process, by the end of the undergraduate study students must be able to work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition and improvisation; history and repertory; and technology.

The learning outcomes are taken from the National Association of Schools of Music Handbook; the NASM is the primary accrediting agency for collegiate music programs in the United States. Section 1 corresponds to the knowledge and skills associated with the Bachelor of Arts degree, while Sections 2 through 7 correspond to a professional degree, typically the Bachelor of Music.

Curriculum

Major Requirements

14 courses, including

MUS159	<p>Music Fundamentals</p> <p>The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.</p>	3 credits
MUS161	<p>Diatonic Tonal Harmony</p> <p>The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p>	4 credits
MUS252	<p>Chromatic Tonal Harmony</p> <p>The course covers principles of chromatic harmony and voice-leading, as well as advanced formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS161 Diatonic Tonal Harmony 	4 credits
MUS267W	<p>History of Music I</p> <p>These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p>	3 credits

MUS368W	History of Music II <p>This course is a continuation of History of Music I, and examines the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • MUS267 History of Music I • MUS267W History of Music I 	3 credits
MUS365	20th-Century Music Analysis <p>The course introduces students to art music of 20th-century through the technical analysis of pitch, rhythmic, formal, and timbral structures. Composers whose work is studied in this course include, but are not limited to, Arnold Schoenberg, Anton Webern, Igor Stravinsky, Pierre Boulez, Charles Ives, John Cage, Morton Feldman, and Iannis Xenakis.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS252 Chromatic Tonal Harmony 	3 credits
	Applied music or composition (2-3)	
	Applied music or composition (2-3)	
	Applied music or composition (2-3)	
	Applied music or composition (2-3)	
MUS262	Introduction to Computer Music <p>The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.</p>	3 credits
INTMUS303	Internship - Music <p>Internship - Music</p>	3 credits
MUS490	Integrative Capstone <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent</p>	3 credits

research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

4 two-credit courses in applied music after acceptance into the major program. Basic keyboard proficiency is expected for completion of the music major.

Music elective

Choose one of the following music electives.

MUS174	Jazz Survey Students explore the origin and development of jazz from its African origins to Dixieland and contemporary styles. They become familiar with jazz musicians and a wide variety of jazz styles through recorded music and, when possible, live performances.	3 credits
MUS150	History of Rock, Pop and Soul This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.	3 credits
MUS210	Music & the Natural World This course will explore the intersection of music and nature in musical thought and practice. Students will explore readings from a variety of historical periods to understand the variety of ways in which the relationship between music and nature has been conceived. Particular emphasis will be placed on Early Modern thought as well as living composers such as David Dunn, Annea Lockwood, John Luther Adams, Alvin Curran, Christopher Shultis, and other sonic ecologists who incorporate sounds from the natural environment into their work. This course fulfills an environmental general education mission course requirement.	3 credits
MUS262	Introduction to Computer Music The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.	3 credits
MUS266	World Music The course focuses on the music and related arts of selected major civilizations of the world, including India, China, and Japan as well as areas such as Southeast Asia, South America, and Africa. Emphasis is placed on the factors resulting in art that is sometimes quite different from Western music.	3 credits

Voice Concentration

MUS171 Choir

1 credits

Students prepare and perform a variety of choral literature. Rehearsals that are 90-120 minutes in duration are held twice per week. Public performances occur at various points throughout the semester. An audition is required.

Two semesters of a foreign language approved by a student's advisor or the Music Program Director. Preferred language includes, French, German and Italian.

Piano and Orchestral Instrument Concentrations

During the course of the program, four solo ensemble performances (piano and instrument, two piano, voice and piano, etc.), supervised by Applied Music Faculty.

Composition Concentration

MUS262 Introduction to Computer Music

3 credits

The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.

Four semesters of MUS 183: Composition (3)

Interdisciplinary Major Requirements

9 courses, excluding the Integrative Capstone

MUS161 Diatonic Tonal Harmony

4 credits

The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.

MUS252	Chromatic Tonal Harmony The course covers principles of chromatic harmony and voice-leading, as well as advanced formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation. Pre-requisites Complete the following course: • MUS161 Diatonic Tonal Harmony	4 credits
MUS267W	History of Music I These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.	3 credits
MUS368W	History of Music II This course is a continuation of History of Music I, and examines the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself. Pre-requisites Complete any 1 of the following courses: • MUS267 History of Music I • MUS267W History of Music I	3 credits
MUS159	Music Fundamentals The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.	3 credits

4 two-credit courses in applied music

Minor Requirements

6 courses selected in conjunction with the music program director and approved by the faculty advisor and music program director.

Certification Program in Music Education

A cooperative program in Music Education Certification has been established with Carnegie Mellon University. At Chatham, students take the courses required for the Music major. Concurrently, at Carnegie Mellon, students cross-register for the courses required for certification in Music Education. In four years, upon successful completion of all courses in both programs, students receive a Bachelor of Arts degree in Music and Certification in Music Education. Well-qualified students should begin the Chatham Music major program in the first year and the Carnegie Mellon program in the sophomore year. Consultation should be

maintained with the Music Program Director at Chatham, and the Certification Officers at both institutions.

Chatham Courses

In addition to all courses required for the Music major and General Education:

2 courses in Mathematics

1 course in English Literature

1 course in Developmental Psychology

1 Professional Education course

1 Applied Music course (fretted instrument)

Carnegie Mellon Courses

15 courses (30-33 credits), including Student Teaching in spring term of Senior Year. A complete listing of all courses is posted on the Music web page.

2022-2023 Course Catalog

Music Business (BA)

The music business major is an interdisciplinary program, combining courses from music and business. The major is designed specifically to prepare students for leadership roles through expertise in strategic planning, management, marketing and artistic planning. Students will gain experience with both live and recorded music management and achieve fluency in music-specific business issues such as copyright, publishing, and performance rights. Students will also identify business opportunities within the music world and focus on planning, organizing, leading, and controlling the use of resources to accomplish performance goals in music organizations.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Admission Requirements

Admissions Materials may be submitted to:

Curriculum

Major

MUS159	Music Fundamentals The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.	3 credits
MUS161	Diatonic Tonal Harmony The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.	4 credits
MUS163	Introduction to Music Business The course presents a broad overview of the music industry and covers topics such as recording, distribution, publishing, promotion, and artist management. Students will explore a range of career possibilities and develop strategies for pursuing career paths of interest.	3 credits

MUS262	Introduction to Computer Music	3 credits
<p>The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.</p>		

MUS350	Legal Issues in Music Performance and Production	3 credits
<p>The course focuses on legal issues specific to the performance and production of music. Topics include copyright, publishing, licensing, performance rights, royalties, artist management, and digital distribution.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS163 Introduction to Music Business 		

MUS490	Integrative Capstone	3 credits
<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>		

2 Applied music or composition electives (MUAxxx courses)

Two electives from the following 4:

MUS252	Chromatic Tonal Harmony	4 credits
<p>The course covers principles of chromatic harmony and voice-leading, as well as advanced formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS161 Diatonic Tonal Harmony 		

MUS267	History of Music I	3 credits
<p>These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p>		

MUS365	20th-Century Music Analysis	3 credits
<p>The course introduces students to art music of 20th-century through the technical analysis of pitch, rhythmic, formal, and timbral structures. Composers whose work is studied in this course include, but are not limited to, Arnold Schoenberg, Anton Webern, Igor Stravinsky, Pierre Boulez, Charles Ives, John Cage, Morton Feldman, and Iannis Xenakis.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS252 Chromatic Tonal Harmony 		

BUS105	Foundations of Business	3 credits
<p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>		
BUS110	Business Statistics	3 credits
<p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 		
BUS243	Principles of Marketing	3 credits
<p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>		
BUS452	Managing Nonprofit Organizations	3 credits
<p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business Complete all 2 of the following courses: • SWK102 Introduction to Social Work, Social Justice and Social Issues • SWK101 Introduction to Sociology 		

ACT222 Financial Accounting Principles I**3 credits**

This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).

2022-2023 Course Catalog

Music Technology (BA)

The music technology major provides a broad foundation in music with focus on recording and computer technologies. Students study music theory, ear-training, music history, and performance or composition, as well as basic sound recording and audio production, and various computer music applications. The major also includes coursework in video production and web design from the Film and Digital Technologies program.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Admission Requirements

Chatham University

Curriculum

Major

MUS159	Music Fundamentals The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.	3 credits
MUS161	Diatonic Tonal Harmony The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.	4 credits
MUS252	Chromatic Tonal Harmony The course covers principles of chromatic harmony and voice-leading, as well as advanced formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation. Pre-requisites Complete the following course: <ul style="list-style-type: none">• MUS161 Diatonic Tonal Harmony	4 credits

MUS205	<p>Sound Recording Basics</p> <p>In this course students learn basic principles of sound recording and apply those concepts to an area of personal significance such as music performance.</p>	3 credits
MUS262	<p>Introduction to Computer Music</p> <p>The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.</p>	3 credits
MUS267W	<p>History of Music I</p> <p>These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p>	3 credits
MUS368W	<p>History of Music II</p> <p>This course is a continuation of History of Music I, and examines the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • MUS267 History of Music I • MUS267W History of Music I 	3 credits
MUS351	<p>Audio Production</p> <p>The course focuses on all stages of the audio production process and addresses both technical and logistical issues. Students gain experience in all roles in this process including producer and engineer.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS205 Sound Recording Basics 	3 credits
MUS352	<p>Advanced Computer Music</p> <p>This course focuses on advanced topics in computer music such as digital synthesis and signal processing, as well as more nuanced approaches to editing and sequencing. Focus is placed on critical listening and aesthetic considerations. Students will complete creative projects that are broad in scope both technically and aesthetically.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • MUS262 Introduction to Computer Music • MUS262 Electronic/Computer Music Studio 	3 credits

MUS365	<p>20th-Century Music Analysis</p> <p>The course introduces students to art music of 20th-century through the technical analysis of pitch, rhythmic, formal, and timbral structures. Composers whose work is studied in this course include, but are not limited to, Arnold Schoenberg, Anton Webern, Igor Stravinsky, Pierre Boulez, Charles Ives, John Cage, Morton Feldman, and Iannis Xenakis.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • MUS252 Chromatic Tonal Harmony 	3 credits
MUS490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3 credits
2 Applied music or composition electives (MUAxxx)		
INTMUS303	<p>Internship - Music</p> <p>Internship - Music</p>	3 credits
ART141	<p>Media Literacy</p> <p>This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.</p>	3 credits
FDT150	<p>Introduction to Digital Video Production</p> <p>Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.</p>	3 credits
ART261	<p>Web Design 1: Code + Aesthetics</p> <p>This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.</p>	3 credits

Pre-requisites Complete all 2 of the following courses:

- FDT210 Studio: Adobe Illustrator
- FDT220 Studio: Adobe Photoshop

Minor in Music Technology

MUS159	Music Fundamentals <p>The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.</p>	3 credits
MUS161	Diatonic Tonal Harmony <p>The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p>	4 credits
MUS205	Sound Recording Basics <p>In this course students learn basic principles of sound recording and apply those concepts to an area of personal significance such as music performance.</p>	3 credits
MUS262	Introduction to Computer Music <p>The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.</p>	3 credits
MUS351	Audio Production <p>The course focuses on all stages of the audio production process and addresses both technical and logistical issues. Students gain experience in all roles in this process including producer and engineer.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• MUS205 Sound Recording Basics	3 credits
MUS352	Advanced Computer Music <p>This course focuses on advanced topics in computer music such as digital synthesis and signal processing, as well as more nuanced approaches to editing and sequencing. Focus is placed on critical listening and aesthetic considerations. Students will complete creative projects that are broad in scope both technically and aesthetically.</p>	3 credits

Pre-requisites Complete any 1 of the following courses:

- MUS262 Introduction to Computer Music
- MUS262 Electronic/Computer Music Studio

2022-2023 Course Catalog

Neuroscience (BS)

Neuroscience is an interdisciplinary field that builds on the foundations of natural and physical sciences, as well as psychology, to examine structures and functions of the nervous system at molecular, cellular, organismal, and social levels. The major is designed for students interested in careers in research, clinical sciences, or medicine.

Admission Requirements

Office of Graduate Admission

Learning Outcomes

Program Goals:

1. To provide students with the knowledge and skills to consider, analyze, and examine the nervous system at molecular, cellular, organismal, and social scales.
2. To develop graduates who can engage independently in scientific inquiry in order to conceive of, analyze, and interpret research questions, methods, and results from themselves or others.
3. To develop graduates skilled in collaborative teamwork who have a broad base of knowledge in the natural and social sciences who can succeed within the interdisciplinary framework of neuroscience.
4. To provide students with the requisite background in biology and investigative skills required to engage in scientific discourse that can address both long-standing and new challenges in the natural sciences, psychology, and neuroscience.

Program Outcomes

At the completion of the program, the graduate will be able to

1. Demonstrate a broad base of knowledge within the natural sciences and psychology, reflecting the interdisciplinary nature of the field of neuroscience.
2. Appropriately and effectively apply scientific methods to solve real-world biological problems, laboratory-based research skill sets.
3. Understand the connections between structure and function at molecular, cellular, organismal, and social levels; understand and explain mechanisms whereby changes at one scale induce changes at all levels.
4. Critically evaluate, analyze, and implement the scientific method as used in published and original research.
5. Effectively communicate scientific information (both ideas and numerical data) to specialist and non-specialist audiences through writing and oral presentations.

Curriculum

Major Requirements

57 Credits of Required Courses and Restricted Electives

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits
BIO144	The Organism This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.	3 credits
BIO144L	Lab: The Organism Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.	1 credits
BIO209	Basic Neuroscience This course is designed for wide appeal. It is an introduction to structure and function of the brain and spinal cord, and how nerves function and communicate. The basics of movement, sensation, language, emotion, and consciousness are discussed. Emphasis is placed on contrasting normal function with altered function in diseases. Three hours lecture per week. Pre-requisites Complete all 3 of the following courses: <ul style="list-style-type: none">• BIO143 The Cell• BIO144 The Organism• CHM108 Chemistry II	3 credits
BIO209LW	Basic Neuroscience Lab Experiments and skills to compliment the material presented in BIO209. The lab course focuses on experimental procedures, scientific analysis and scientific writing. Three hours of laboratory per week. Laboratory Fee. Corequisite: BIO 209.	2 credits

BIO231	<p>Cell and Molecular Biology</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 The Cell • CHM108 Chemistry II 	3 credits
BIO319	<p>Experimental Neuroscience</p> <p>With an emphasis on neuropathology, the course builds on the foundations of neuroscience to explore advanced topics in sensation, motor control, emotion, and cognition. Classical and modern methods for investigating the structure and function of the nervous system will be examined through lectures, discussions, and student projects.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BIO209 Basic Neuroscience <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO231 Cell and Molecular Biology • BIO231W Cell and Molecular Biology 	3 credits

BIO408	<p>Developmental Biology</p> <p>A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO231 Cell and Molecular Biology • BIO231W Cell and Molecular Biology 	3 credits
OR		
BIO417	<p>Genetics</p> <p>This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO231W Cell and Molecular Biology • CHM205 Organic Chemistry I • MTH110 Elementary Statistics 	3 credits

OR

CHM338	Biochemistry I	3 credits
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This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.

Pre-requisites Complete the following course:

- CHM205 Organic Chemistry I

BIO490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete the following course:

- IND350W Scientific Research Methods

CHM108	Chemistry II	3 credits
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The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.

Pre-requisites Complete any 1 of the following courses:

- CHM105 General Chemistry
- CHM107 Chemistry I

CHM110L	Chemistry II Laboratory	1 credits
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Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.

CHM205	Organic Chemistry I	3 credits
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Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.

Pre-requisites Complete all 2 of the following courses:

- CHM108 Chemistry II
- CHM110L Chemistry II Laboratory

CHM215L	Elementary Organic Laboratory Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.	2 credits
IND200W	Introduction to Scientific Research This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ENG105 First-Year Writing	2 credits
IND350W	Scientific Research Methods This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.	2 credits
MTH151	Calculus I This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.	4 credits
PSY101	General Psychology An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.	3 credits
PSY307	Cognitive Psychology A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation. Pre-requisites Complete the following course: <ul style="list-style-type: none">• PSY101 General Psychology	3 credits

PSY341	Psychobiology	3 credits
<p>An examination of the biological correlates of behavior. Emphasis is placed on the central nervous system and its structure, organization, and function. Specific topics considered are sleep, learning, memory, sexual behavior, motivation, and complex processes such as thought and language.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

Electives

2 PSY3XX Electives

PSY326	Psychology of Learning	3 credits
<p>An overview of the principles and research associated with modern learning theory. Topics include classical conditioning, operant learning, reinforcement theory, and stimulus control of behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY333	Abnormal Behavior	3 credits
<p>A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY331	Social Psychology	3 credits
<p>An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY230	Animal Behavior	3 credits
<p>A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY340	Psychopharmacology	3 credits
<p>The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• PSY101 General Psychology		
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PSY351	Childhood and Adolescence	3 credits
<p>A general introduction to theories and methods of developmental psychology. The course covers patterns and possible mechanisms of behavioral development from conception through adolescence. Audio- and videotapes of infants, children, and their families supplement lectures, discussions, and written exercises. The life-span perspective is continued in PSY 352.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• PSY101 General Psychology		
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PSY352	Adult Development	3 credits
<p>The periods of adolescence and adulthood are examined through current theories of development. A life cycle perspective is adopted to study physical, cognitive and social/emotional development. Questions of qualitative changes, continuity/discontinuity stages, individual differences and the impact of biological, environmental and cultural factors throughout adulthood are addressed. This course is designed to follow PSY 351, but may be taken as a stand-alone course.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• PSY101 General Psychology		

2022-2023 Course Catalog

Nursing: RN-BSN (BSN)

Building upon a liberal arts foundation, the RN-BSN program expands the student's nursing knowledge, skills, and professional role. The program prepares the nursing graduate, based on the AACN (2008) Essentials, to provide holistic, evidence-based nursing care, in health and in illness, with diverse populations in the ever-changing and complex healthcare environment. The graduate will be able to function as an integral member of an interprofessional team promoting patient safety, cultural sensitivity, and quality outcomes. The BSN graduate will demonstrate clinical reasoning, care management and evaluation skills, use of informatics technology, and genetics/genomics knowledge through professional nursing practice with patients across the lifespan in various healthcare settings. These nurses are committed to ongoing professional education and scholarly work to remain current in the generalist nursing role.

The RN-BSN program at Chatham University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington DC 20001, (202) 887-6791.

Program Structure:

The RN-BSN program is an accelerated online distance learning program that requires completion of a minimum total of 120 credit hours in college level courses. Practice experience activities are integrated as a way for students to demonstrate new knowledge caring for a variety of patients across the lifespan and continuum of care. Students are admitted to the program in the Fall and Spring semesters. Students can enroll in full-time or part-time studies. Students must maintain a cumulative 2.0 GPA or better to be awarded the Bachelor of Science in Nursing degree. All undergraduate students must satisfy the General Education requirements either through transfer credits or completion of additional coursework.

Admission Requirements

Applicant must:

- Complete the [online application](#)
- Submit proof of completion of an RN degree (Associate or Diploma) with a minimum 2.0 GPA
- Submit a copy of a current unencumbered RN license
- Submit a copy of official transcripts of all completed post-high school education from all schools attended

Admission Materials may be submitted to:

- Chatham University
Berry Hall/SCPS Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: GradAdmission@chatham.edu

Additional Information

Learning Outcomes

Upon completion of the RN-BSN Program, the student will:

1. Synthesize knowledge from nursing and other related disciplines in acquisition and application of nursing knowledge, competencies, and values for professional practice.
2. Demonstrate knowledge for nursing leadership, quality improvement, and patient safety in order to provide high quality care.
3. Integrate evidence-based findings into professional nursing practice.
4. Apply skills related to information management and patient care technology in order to deliver quality patient care
5. Comprehend the influence of healthcare policies and finance on healthcare system operations.
6. Utilize interprofessional collaboration and communication with other health team members in planning, coordinating, providing, and evaluating care.
7. Apply concepts of clinical prevention and health promotion to individuals, families, and communities in a global society.
8. Provide professional, culturally competent, and ethically congruent care that reflects dignity and uniqueness of individuals and groups in diverse global populations.
9. Utilize the nursing process and health care resources in the protection, promotion, and optimization of health in care of individuals, families, and communities across the lifespan.

Curriculum

Degree Requirements

26 required core RN-BSN credits

IND175	Introduction to Nursing Resources This course will teach nursing students how to develop and apply skills in locating, evaluating, and synthesizing information from a variety of library and information resources. The work completed in this course will help nursing students become more efficient in areas of evidence-based practice.	1 credits
NUR402	Health Policy and Finance for Nurses This course is designed to explore the role of Health and Public Policy, financial considerations, formulation and role of legislation and regulation, and ethical principles related to ANA Code of Ethics. Also addressed are topics including value-based purchasing, end-of-life care, living wills, advanced directives, social networking and Affordable Care Act.	3 credits

NUR403W	Women's Health Nursing This course will present an overview of issues relevant to women's health nursing. Nursing assessment techniques specific to female clients will be explored. Specific nursing interventions to promote women's health will be covered including: HIV, early detection of female cancers, reproductive health, mental health issues, osteoporosis, pharmacokinetics, nutrition, physical fitness.	3 credits
NUR407	Scholarship for Evidence-Based Practice This course will enable students to critically review nursing research, choose a relevant clinical issue to examine, explore literature, and utilize nursing research in clinical practice. Ethical principles of nursing research, particularly protection of human subjects and other ethical accountabilities focusing on research utilization and evidence-based practice will be explored.	3 credits
NUR409W	Clinical Prevention, Population and Environmental Health This course provides a framework for the development of nursing interventions promoting population and environmental health for individuals and communities. Health promotion will be a significant focus of this course.	3 credits
NUR410	Global Cultural Diversity and Specialty Population Nursing This course is focused on various cultural and specialty populations. Multiple aspects of culture, vulnerability, and needs of individual populations will be analyzed and discussed. Content includes issues of ethics, social justice, health literacy, and barriers to care.	3 credits
NUR411	Geriatric Nursing Multiple aspects of geriatric health and the aging population will be explored. Specific nursing interventions to promote older adult health will be covered including pharmacological considerations, nutrition, elder abuse, sexuality, coping with loss and grief, health and wellness promotion and the continuum of care.	3 credits
NUR412	Nursing Communication and Quality Improvement This course will prepare the student for effective communication and collaboration amongst the interprofessional team with the goal of practicing high quality, safe, patient-centered care. Topics of quality improvement and interprofessional communication will be emphasized.	3 credits
NUR499W	Nursing Leadership and Professional Practicum This culminating course, which fulfills Chatham's internship requirement, encompasses various aspects of professionalism and leadership that students will encounter and utilize at all levels of nursing. Students will apply leadership concepts and decision-making skills while they complete their capstone project.	4 credits

Practice Experience Requirements

CCNE requires that RN-BSN programs include appropriate practice experiences (PE) that enable students to integrate new knowledge at the BSN generalist nurse level, leading to attainment of program learning outcomes. Chatham University's RN-BSN program integrates PE activities into specific courses, through designated assignments, which require students to integrate, apply, and demonstrate new knowledge when providing care to a variety of patients across the lifespan and continuum of care. Students do not need to submit an affiliation agreement for the PE assignments and there are not prescribed numbers of hours that students must complete. Course faculty will act as the preceptor for the students in the PE, meaning the course faculty are a resource and are available for questions or guidance throughout the process. PE assignments, which are evaluated by faculty, allow students to understand, perform, and refine professional competencies while meeting course and program learning outcomes. Students must complete all PE assignments to graduate from the RN-BSN program.

Transfer Credits

Students may transfer up to 90 credit hours of college level courses into the program. First degree students who graduated before December 2015 from select pre-licensure nursing schools that hold an articulation agreement with Chatham may be able to transfer up to 94 credits into the program through Summer 2019. Beginning Fall 2019 all first degree students may transfer in a maximum of 90 credits. Second degree students who have already earned a bachelor's degree from an accredited institution of higher education and an Associate or Diploma degree from a nursing program may complete the RN-BSN at Chatham University by completing only the 26 required core RN-BSN credits. All requests for transfer credit must be made prior to enrollment. A minimum of 30 credits, including the 26 required core RN-BSN credits, must be completed at Chatham University, unless students transferred in 94 credits.

Liberal Arts courses

Liberal Arts courses to fulfill General Education requirements for RN-BSN students include the following. Other course options may be available to fulfill requirements. Students should consult with their Academic Advisor. (Note: Requirements may vary based on articulation agreements)

ART141	Media Literacy	3 credits
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This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.

BIO119	Medical Terminology	3 credits
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This course is designed for students who need a broad coverage of medical terminology and who have little or no background. It includes studies of etymology and human anatomy. There is a special emphasis on clinical applications. Three hours of lecture including media presentations per week.

ENG241	Writing for Professionals	3 credits
<p>Writing for Professionals helps students write clearly and effectively about a variety of subjects in genres related to the workplace. Through writing and reading assignments, students learn about targeting an audience, organizing writing, and developing a professional style. They create documents useful when seeking employment and in the workplace.</p>		
MUS266	World Music	3 credits
<p>The course focuses on the music and related arts of selected major civilizations of the world, including India, China, and Japan as well as areas such as Southeast Asia, South America, and Africa. Emphasis is placed on the factors resulting in art that is sometimes quite different from Western music.</p>		
MTH110	Elementary Statistics	3 credits
<p>Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.</p>		
PSY101	General Psychology	3 credits
<p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>		

2022-2023 Course Catalog

Pathways to Nursing (BSN)

- Pathways to Nursing prepares world-ready nurses to develop the skills necessary in today's health care system.
- Through a partnership with UPMC Shadyside School of Nursing students are educated by faculty members from both Chatham University and UPMC Shadyside School of Nursing.
- Courses in the first year will be held on the Chatham University campus. In the second and third year, nursing courses are taught on the UPMC Shadyside School of Nursing campus.
- Students are required to maintain a 2.75 GPA to enter the UPMC Shadyside School of Nursing program.
- Clinical experiences will be scheduled utilizing a variety of UPMC healthcare facilities in the local area.
- Once a student completes the nursing diploma program at UPMC Shadyside School of Nursing they become eligible to take the NCLEX-RN (National Council for Licensing Examination for Registered Nurse) to obtain a license as a registered nurse (RN).
- Students who successfully pass the NCLEX-RN enter Chatham's Commission on Collegiate Nursing Education (CCNE) accredited on-line RN-BSN (Bachelor of Science in Nursing) program for the final year.
- Students may work as a Registered Nurse (RN) while completing the RN-BSN Program in their fourth (senior) year.
- Pathways to Nursing allows the student to complete a full four-year college experience at Chatham University while earning RN licensure, working as an RN, and finishing their BSN degree.

The RN-BSN program at Chatham University is accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington DC 20036, (202)887-6791.

Eligibility for Pennsylvania Nursing Licensure:

Pennsylvania law prohibits the State Board of Nursing from issuing a license to anyone who has been convicted of a felony relating to a controlled substance, unless at least ten years have elapsed from the date of conviction, and the applicant satisfies other criteria of personal rehabilitation. At the time of application for licensure, the State Board also requires reporting of any crime, felony, misdemeanor, or pending criminal charges.

All undergraduate students must satisfy the General Education requirements.

Admission Requirements

Applications for admission to the Chatham University Pathways to Nursing Program must include:

- The Chatham University online application
- The supplemental UPMC Shadyside School of Nursing application
- High School transcripts showing graduation date and 2 years of science with related lab coursework
- Post-secondary Education: all transcripts must be submitted

- Completion of the following high school courses with a “C” or higher
 - 4 years of English
 - 2 years of Science (Biology or Chemistry) with a related Laboratory
 - 2 years of Mathematics (1 of which is Algebra)
 - 3 years of Social Studies
 - Recommended: Anatomy and Physiology
 - High school GPA of 3.0 or greater
 - SAT > 1050 or ACT > 21 or TEAS test score of 62% or higher. Offered by ATI at <https://atitesting.com/Home.aspx> and required for admission to UPMC Shadyside School of Nursing.

If accepted for admission to UPMC Shadyside School of Nursing, the candidate will receive a written offer of acceptance. To reserve a space in the incoming class, the candidate must acknowledge acceptance in writing per the letter offering admission to the school.

Once accepted to Pathways to Nursing, all students are required to satisfy the requirements for participation in clinical rotations including background checks and a health screening, and a current CPR certification.

All students will be provided a current checklist detailing documentation to be provided and the respective submission deadlines when attending a post-acceptance UPMC Shadyside School of Nursing Information Session.

Students not meeting the requirements to enter or remain enrolled in the UPMC Shadyside School of Nursing Program will receive written notification from the School of Health Sciences Dean's office advising them to select an academic major other than Pathways to Nursing. Students are required to complete appropriate documentation to secure a different academic major and advisor. The University Registrar's Office will automatically change the student's major to “undeclared” and assign a new advisor if the appropriate documentation is not completed within the timeframe designated in the notification letter.

Post-Acceptance Information Session/New Student Orientation

Attendance at a post-acceptance information session/new student orientation is required once the offer of admission has been accepted. Topics covered at these sessions include academic schedules, photo ID cards, and compliance requirements.

Learning Outcomes

Upon completion of the Program, the student will:

1. Synthesize knowledge from nursing and other related disciplines in acquisition and application of nursing knowledge, competencies, and values for professional practice.
2. Demonstrate knowledge for nursing leadership, quality improvement, and patient safety in order to provide high quality care.
3. Integrate evidence-based findings into professional nursing practice.
4. Apply skills related to information management and patient care technology in order to deliver quality

patient care Comprehend the influence of healthcare policies and finance on healthcare system operations.

5. Utilize interprofessional collaboration and communication with other health team members in planning, coordinating, providing, and evaluating care.
6. Apply concepts of clinical prevention and health promotion to individuals, families, and communities in a global society. Provide professional, culturally competent, and ethically congruent care that reflects dignity and uniqueness of individuals and groups in diverse global populations.
7. Utilize the nursing process and health care resources in the protection, promotion, and optimization of health in care of individuals, families, and communities across the lifespan.

Curriculum

Major Requirements

N101	Professional Concepts of Nursing This course introduces the student to the role of the professional nurse. The concepts of communication, clinical decision making, professionalism and patient education are explored. In addition, the holistic aspects of patient care such as culture, spirituality, legal and ethical issues will be discussed. Tanner's clinical judgment model will provide the framework for the student's development of clinical judgment and decision making.	3 credits
N102	Foundational Concepts of Nursing This course introduces the student to the foundational concepts of nursing practice across the lifespan. Basic care and comfort is explored through the concepts of nutrition, elimination, safety, mobility and sensory perception. Physical assessment is a major component of this course. The promotion of health and wellness is an underlying theme carried throughout the course. The student is introduced to basic foundational skills of nursing practice, including medication administration, through both the clinical and lab settings. Students engage in clinical experiences in inpatient medical-surgical units.	9 credits
N201	Physiological Concepts of Nursing This course introduces the student to the physiological concepts of nursing practice across the lifespan. The fundamental aspects of oxygenation, perfusion, acid-based balance, fluid and electrolytes infection, immunity, inflammation, digestion and metabolism are explored. Through the integration of the nursing concepts, along with Tanner's clinical judgment model, the student begins to respond to identified patient problems in the clinical setting. Students engage in clinical experiences in acute medical-surgical units.	10 credits

N301	Complex Individual and Family Nursing Concepts	11 credits
	<p>This course introduces the student to complex individual and family concepts of nursing practice. The course explores dynamic concepts across the lifespan. Family dynamics, reproduction and growth and development alterations are a major focus of the course. Concepts of mental health nursing are explored as they relate to the individual and the overall impact on the family. Through the integration of nursing concepts, along with Tanner's clinical judgment model, the student focuses on assisting the individual and family to adjust to health alterations across the lifespan. Students engage in various clinical experiences in the areas of pediatric, obstetric, geriatric and behavioral health.</p>	
N320	Advanced Nursing Concepts	8 credits
	<p>This course introduces the student to advanced concepts of nursing practice. The course builds and expands on the concepts of oxygenation, perfusion, metabolism and infection that were previously introduced in Nursing 211. In addition, the advanced concepts of cellular regulation, intracranial regulation and alterations in tissue integrity are explored. Through the integration of nursing concepts, along with Tanner's clinical judgment model, the student engages in advanced clinical decision making in high acuity environments. Students engage in various clinical experiences that take place in stepdown units, critical care units and emergency departments.</p>	
N340	Transition Into Nursing Practice	6 credits
	<p>This course serves as the student's transition into the role of professional nursing practice. Leadership and management concepts are applied with an emphasis on safety and quality nursing care. Clinical is conducted through a preceptor experience where the student is given the opportunity to manage, delegate and prioritize care for multiple patients.</p>	
N360	NLCEX Prep Course	2 credits
	<p>This course provides the students with NCLEX preparation through content reviews and test taking strategies.</p>	
NUR402	Health Policy and Finance for Nurses	3 credits
	<p>This course is designed to explore the role of Health and Public Policy, financial considerations, formulation and role of legislation and regulation, and ethical principles related to ANA Code of Ethics. Also addressed are topics including value-based purchasing, end-of-life care, living wills, advanced directives, social networking and Affordable Care Act.</p>	
NUR403W	Women's Health Nursing	3 credits
	<p>This course will present an overview of issues relevant to women's health nursing. Nursing assessment techniques specific to female clients will be explored. Specific nursing interventions to promote women's health will be covered including: HIV, early detection of female cancers, reproductive health, mental health issues, osteoporosis, pharmacokinetics, nutrition, physical fitness.</p>	

NUR407	Scholarship for Evidence-Based Practice This course will enable students to critically review nursing research, choose a relevant clinical issue to examine, explore literature, and utilize nursing research in clinical practice. Ethical principles of nursing research, particularly protection of human subjects and other ethical accountabilities focusing on research utilization and evidence-based practice will be explored.	3 credits
NUR409W	Clinical Prevention, Population and Environmental Health This course provides a framework for the development of nursing interventions promoting population and environmental health for individuals and communities. Health promotion will be a significant focus of this course.	3 credits
NUR410	Global Cultural Diversity and Specialty Population Nursing This course is focused on various cultural and specialty populations. Multiple aspects of culture, vulnerability, and needs of individual populations will be analyzed and discussed. Content includes issues of ethics, social justice, health literacy, and barriers to care.	3 credits
NUR411	Geriatric Nursing Multiple aspects of geriatric health and the aging population will be explored. Specific nursing interventions to promote older adult health will be covered including pharmacological considerations, nutrition, elder abuse, sexuality, coping with loss and grief, health and wellness promotion and the continuum of care.	3 credits
NUR412	Nursing Communication and Quality Improvement This course will prepare the student for effective communication and collaboration amongst the interprofessional team with the goal of practicing high quality, safe, patient-centered care. Topics of quality improvement and interprofessional communication will be emphasized.	3 credits
NUR499W	Nursing Leadership and Professional Practicum This culminating course, which fulfills Chatham's internship requirement, encompasses various aspects of professionalism and leadership that students will encounter and utilize at all levels of nursing. Students will apply leadership concepts and decision-making skills while they complete their capstone project.	4 credits
IND175	Introduction to Nursing Resources This course will teach nursing students how to develop and apply skills in locating, evaluating, and synthesizing information from a variety of library and information resources. The work completed in this course will help nursing students become more efficient in areas of evidence-based practice.	1 credits

BIO116	Basic Anatomy and Physiology I with Lab	4 credits
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This is the first of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week. Enrollment in a school of nursing is required.

BIO117	Basic Anatomy and Physiology II with lab	4 credits
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This is the second of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week.

Pre-requisites Complete the following course:

- BIO116 Basic Anatomy and Physiology I with Lab

2022-2023 Course Catalog

Policy Studies (BA)

Policy Studies is designed to introduce students to policy making in public or private domains. It provides an appropriate foundation for students interested in public service, either in elected office or in government agencies, as well as students interested in non-governmental policy organizations. It serves as a base for graduate work in public policy and law, as well as more traditional academic fields.

Admission Requirements

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Learning Outcomes

Students who successfully complete the Policy Studies major will be able to:

- Demonstrate a knowledge of the institutions and processes of political decision-making and their impact on policy-making
- Demonstrate an ability to apply historical, economic and political data and theories to understand, articulate, and evaluate domestic and international public policy
- Students will be able to locate and evaluate the perspective, quality and accuracy of information resources
- Students will be able to demonstrate ability to characterize a policy issue and apply skills and knowledge acquired in the curriculum to analyze that issue and make policy recommendations
- Students will be able to clearly communicate knowledge via oral and written means
- Students will be able to write simple policy memos

Chatham University Policy Studies

Falk Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

17 courses, including:

ECN101	Principles of Macroeconomics The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.	3 credits
ECN102	Principles of Microeconomics Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3 credits
HIS100	Introduction to World History This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.	3 credits
OR		
HIS102	Introduction to American History This course examines significant areas in the development of American society from the Colonial period to the present. It focuses particularly on the issues of gender, class, race, religion, politics, and ideology to provide students with the grounding in those areas crucial to understanding today's society.	3 credits
POL100	Introduction to Comparative Politics Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.	3 credits
OR		
POL101	American Government and Public Policy This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.	3 credits
POL202W	Understanding Public Policy This course introduces students to the concepts and tools used in the analysis of public policies, and uses these concepts and tools to examine public policies in the United States and other industrial democracies.	3 credits

Pre-requisites Complete any 1 of the following courses:

- GOV101 American Government and Public Policy
- POL101 American Government and Public Policy

BUS110	Business Statistics	3 credits
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This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.

Pre-requisites Complete the following course:

- BUS105 Foundations of Business

OR

MTH110	Elementary Statistics	3 credits
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Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.

ECN355	Economic Analysis of Public Policy	3 credits
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This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

POL311W	Selected Topics in Social Science Research	3 credits
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The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.

POL490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete any 1 of the following courses:

- POL311 Selected Topics in Social Science Research
- POL311W Selected Topics in Social Science Research

*The Integrative Capstone is registered in the instructor's program and focuses on a policy issue.

1 approved 3-credit internship (INTPOL, INTECN, INTHIS 303)

1 economic analysis electives from the following:

ECN358W	Economic Development	3 credits
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An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
 - ECN101 Principles of Macroeconomics
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ECN262	Global Environmental Economics	3 credits
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This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics
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ECN351	International Trade and Finance	3 credits
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An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.

Pre-requisites Complete any 1 of the following courses:

- ECN102 Principles of Microeconomics
 - ECN101 Principles of Macroeconomics
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Or appropriate course substitute approved by the program director

2 sociopolitical analysis electives from the following:

POL262	<p>Women and Politics</p> <p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	3 credits
POL300	<p>The U.S. Congress</p> <p>This course examines the functions, rules, customs, and procedures of the US Congress. Topics include the relationship between the legislative branch and other governmental institutions, including the relationship between Congress, the electorate, and interest groups. Students will also explore the committee system and the leadership structure. Prerequisite(s): POL101 or permission of the instructor.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	3 credits
POL302	<p>Ethnic Conflict</p> <p>This course is designed to introduce students to theories about the sources of nationalist and ethnic conflict and strategies that have been used to manage these conflicts. In the first part of class we will examine sources of ethnic identity and how governments have attempted to reinforce or deemphasize those identities. Second, we will examine how domestic factors have and have not worked to suppress ethnic conflict. Finally, we will examine how the international community or other third parties have attempted to bring about the peaceful resolution of conflicts.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • POL100 Introduction to Comparative Politics • POL104 Introduction to International Relations 	3 credits
POL319	<p>Politics of the European Union</p> <p>This course is designed to introduce students to the political, economic and social transformation of the European Union. Students will gain an understanding of the historical evolution of the EU, the institutional design of the EU, the major policy areas governed by the EU and major issues facing the expansion of EU in the near future.</p>	3 credits
POL324	<p>U.S. Foreign Policy</p> <p>This course examines the diverse factors that influence the formulation and implementation of American foreign policy. This entails the study of three components: the composition of governmental institutions involved in the policy-making process; the societal forces affecting foreign policy; and the changes in the global environment, which present new challenges to the foreign policy process. To this end, the course examines several issues, including the dominant patterns of continuity and change in foreign policy, the ability of the president to govern in foreign affairs, and the tension inherent between the needs of democracy and national security concerns.</p> <p>Pre-requisites Complete the following course:</p>	3 credits

- POL104 Introduction to International Relations

SWK322W	Social Welfare: Women and Policy	3 credits
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This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.

Or appropriate course substitute approved by the program director

2 historical analysis electives from the following:

HIS216	Rise of the Third World	3 credits
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The emergence of Third-Worldism after 1945 is the central historical development of the twentieth century. The Afro-Asian movement namely aimed at recasting the historical initiative away from implacable colonialist powers. This course focuses on the analysis of doctrines and models that have collectively marked the rise of the Third World.

HIS228	Recent African History	3 credits
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Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity bring overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.

HIS247	American Environmental History	3 credits
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Environmental history examines human interaction with their environment over time, a relationship shaped by cultures and political economies. In US history, there have been competing ideologies of capitalist exploitation, conservationism, preservationism, and sustainability. The course will also introduce students to different facets and methods of environmental history.

HIS342	Post/Modern China: Digital Storytelling	3 credits
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An examination of Chinese cultural history from early 1900s to early 2000s, via literature and film, with training in digital storytelling techniques. Discussion of this dramatic national narrative framed by political and aesthetic considerations. Our interpretation and transmission of these narratives framed also by ethics and efficacy.

Pre-requisites Complete the following course:

- ENG105 First - Year Communication Seminar

Or appropriate course substitute approved by the program director

Interdisciplinary - Policy Studies

Policy Studies is a multidisciplinary major, centered in economics, history, and political science. The required core of courses provides students with the tools essential for a coherent understanding of and participation in policy making, as well as those tools necessary to undertake a policy-oriented tutorial. Policy Studies is designed to prepare students for either a career in international or domestic policy making in public and private settings and can serve as a base for graduate work in international relations, public policy, and law, as well as for more traditional academic fields. The Interdisciplinary Policy Major is 24 credits plus an internship and integrative capstone project.

POL100	Introduction to Comparative Politics	3 credits
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Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.

or

POL101	American Government and Public Policy	3 credits
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This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.

ECN101	Principles of Macroeconomics	3 credits
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The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.

or

ECN102	Principles of Microeconomics	3 credits
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Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.

POL202W	Understanding Public Policy	3 credits
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This course introduces students to the concepts and tools used in the analysis of public policies, and uses these concepts and tools to examine public policies in the United States and other industrial democracies.

Pre-requisites Complete any 1 of the following courses:

- GOV101 American Government and Public Policy
- POL101 American Government and Public Policy

HIS 200 - level elective

POL311W Selected Topics in Social Science Research 3 credits

The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.

ECN355 Economic Analysis of Public Policy 3 credits

This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.

Pre-requisites Complete the following course:

- ECN102 Principles of Microeconomics

POL 300 - level elective

Additional policy course from a list (including ECN, POL, and SWK course)

2022-2023 Course Catalog

Political Science (BA)

The Political Science program offers courses in American Politics, International Politics, and Law-related subjects. The study of Political Science develops students' conceptual skills and provides them with the tools to analyze political concepts in broad perspective and make sense of new issues as they arise. In addition to knowledge of the subject, the program is designed to develop skills in critical thinking and written and oral expression, deepen commitment to social responsibility and political participation, and to position students to go on to graduate study and professional careers.

The program maintains affiliations with programs and centers across the University and within the community, which bring students into contact with scholars and practitioners from multiple academic fields. There are opportunities for students to learn outside of the classroom, for example through participation in internships and in the programs and research of Pennsylvania Center for Women and Politics.

Admission Requirements

Integrated Degree Program

Learning Outcomes

This section explains the discipline-specific goals and objectives of the Political Science program.

Cognitive

1. Demonstrate a knowledge of the political and judicial actors, institutions and processes of the government of the United States
2. Demonstrate a knowledge of past and present political actors and institutions through which world governments and organizations affect, promote, and implement public policies
3. Demonstrate the ability to recognize the influence of global forces and identify their connections to local and national developments

Program Competency: Critical Reading

Demonstrate ability to extract and interpret information from both primary and secondary sources and identify and critique and major arguments and evidence

Program Competency: Analytical Thinking

Demonstrate ability to identify strengths and weaknesses of arguments in the context of previously learned material

Program Competency: Problem Solving

Demonstrate ability to formulate hypotheses and research questions based on data

General Education Competency: Information Literacy

Demonstrate ability to locate and evaluate the perspective, quality and accuracy of information resources

General Education Competency: Written/Oral Communication

1. Demonstrate ability to clearly communicate knowledge via oral and written means
2. Demonstrate ability to utilize the proper methodologies necessary for writing a political science research paper

Curriculum

Major Requirements

12 courses, including:

POL101	American Government and Public Policy This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.	3 credits
POL100	Introduction to Comparative Politics Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.	3 credits
OR		
POL104	Introduction to International Relations A survey of significant patterns and trends in 20th-century world politics, modes of conducting relations among nations, instruments for promoting national interests, and current problems of economic and political interdependence.	3 credits
POL202W	Understanding Public Policy This course introduces students to the concepts and tools used in the analysis of public policies, and uses these concepts and tools to examine public policies in the United States and other industrial democracies. Pre-requisites Complete any 1 of the following courses:	3 credits

- GOV101 American Government and Public Policy
- POL101 American Government and Public Policy

POL311W Selected Topics in Social Science Research 3 credits

The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.

POL490 Integrative Capstone 3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete any 1 of the following courses:

- POL311 Selected Topics in Social Science Research
- POL311W Selected Topics in Social Science Research

1 approved 3-credit internship (INTPOL 303)

5 additional 3-credit program electives, 3 at the 200-level and 2 at the 300-level or above

Interdisciplinary Major Requirements

8 courses, exclusive of the Integrative Capstone:

POL100 Introduction to Comparative Politics 3 credits

Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.

OR

POL104 Introduction to International Relations 3 credits

A survey of significant patterns and trends in 20th-century world politics, modes of conducting relations among nations, instruments for promoting national interests, and current problems of economic and political interdependence.

POL101	American Government and Public Policy	3 credits
	This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.	

POL311W	Selected Topics in Social Science Research	3 credits
	The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.	

OR

an approved methods course in another discipline

1 approved 3-credit internship (INTPOL 303)

4 additional 3 credit program electives, 3 at the 200-level and 1 at the 300-level or above.

Pre-Law Minor Requirements

Chatham's pre-law program is designed to encourage and support students with an interest in careers in law. It also helps students prepare to attend law school. The program includes the pre-law advisor, a pre-law minor, co-curricular programs offered in partnership with the PA Center for Women, Politics, and Public Policy, and the support of an advisory committee.

Chatham University works collaboratively with Duquesne University and Stetson University to assist those student interested in pursuing a law degree. To learn more about this program, visit our [Collaborative Programs Page](#).

5 courses, including:

ENG241	Writing for Professionals	3 credits
	Writing for Professionals helps students write clearly and effectively about a variety of subjects in genres related to the workplace. Through writing and reading assignments, students learn about targeting an audience, organizing writing, and developing a professional style. They create documents useful when seeking employment and in the workplace.	

OR

ENG355	Advanced Writing and Stylistics	3 credits
<p>This is an advanced writing class which concentrates on style, meaning, and effect. It is designed for upper-level students, and emphasizes the skills of writing more effective sentences, paragraphs and essays. The course focuses on writing academic papers, applications, proposals, and personal statements across the disciplines in appropriate formats.</p>		
POL303	Constitutional Law I: US Govt Powers/Relationships	3 credits
<p>This course examines the political science of law and courts through a consideration of the scope of Article III jurisdiction, bargaining and decision-making on the U.S. Supreme Court, and political struggles over doctrine within the judicial hierarchy. Topics include the ways in which courts have affected Congressional power over taxation and commerce and presidential domestic and international powers.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 		
PHI121	Introduction to Logic	3 credits
<p>An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.</p>		
IND104	LSAT Preparation	1 credits
<p>This course will help students prepare for the LSAT, by focusing on study skills particular to this examination.</p>		

Political Science Minor Requirements

6 courses, including:

POL100	Introduction to Comparative Politics	3 credits
<p>Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.</p>		
OR		
POL104	Introduction to International Relations	3 credits
<p>A survey of significant patterns and trends in 20th-century world politics, modes of conducting relations among nations, instruments for promoting national interests, and current problems of economic and political interdependence.</p>		

POL101 American Government and Public Policy

3 credits

This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.

4 additional program electives, at least 1 at the 300-level or above.

2022-2023 Course Catalog

Psychology (BA)

The major course work is organized in a common structure for the baccalaureate curriculum: a required introductory course, three methodology courses, six advanced content courses, and the integrated capstone experience.

Common elements of the curriculum include active and collaborative learning, research projects, fieldwork, practice and community service, discussion of ethical issues and values, and courses and research methods that heighten the student's understanding of diversity in human behavior. Learning about psychology occurs in multiple settings: the classroom, internships, participation in psychology Psi Chi (the National Honor society for Psychology), and attendance and presentation of research at regional and national conferences. The program places a strong emphasis on effective student advising that goes beyond guidance in course selection and information about institutional procedures. The intent is to motivate students to explore and develop their values, interests, abilities, and career and life goals and to encourage students to consider post-baccalaureate educational possibilities, including graduate and professional school.

The psychology curriculum enables students to think scientifically about behavior and mental processes, to appreciate and respect others, and to pursue a variety of post-baccalaureate alternatives, including employment and graduate or professional school. This major is applicable to any career in which an understanding of human thought and behavior is central, including the health sciences, personnel/human resources, social work, introductory level counseling, interviewing, and data collection.

Admission Requirements

Admission to the B.A. in Psychology Program will be based on:

- High school diploma or GED with a GPA of 2.5 or higher
- Completed free online application at <http://apply.chatham.edu>
- Admission Essay: Provide a description of your academic and professional goals. Assess how you believe that the completion of the BA degree will help you achieve these goals (minimum 500 words).
- Official Academic Transcripts from all regionally accredited colleges or universities previously attended
 - Students may receive transfer credits for courses in which they have received a letter grade of "C" or better.

Application materials may be addressed to:

Chatham University
Berry Hall/SCPS Admissions
Woodland Road
Pittsburgh, PA 15232

Learning Outcomes

Upon successful completion of the Psychology major, students will be able to:

1. Demonstrate knowledge of the major concepts and empirical findings related to Human Development, Biological Bases of Behavior, Learning and Cognition, and Social Influences of Behavior and Individual Differences.
2. Demonstrate and apply knowledge of research methods for implementation of quasi-experimental, correlational and/or qualitative research with the use of statistical software packages.
3. Apply critical thinking to determine the credibility of information and develop, defend and criticize arguments.
4. Demonstrate skills in written and oral communication including the presentation of scientific and own ideas in a public forum.
5. Demonstrate awareness of how basic psychological principles and theories may apply differently across cultures.
6. Demonstrate personal development through fulfillment of student responsibilities and the application of psychological knowledge to self-development.
7. Demonstrate professional development and professionalism through appropriate use of supervision/advising, career exploration and participation in career related internships and/or independent studies.
8. Demonstrate knowledge of ethical issues and behavior in relation to the treatment of human and non-human research subjects, and in the application and practice of psychology.

Curriculum

Major Requirements

(students will be able to count up to 2 courses to satisfy both major and general education requirements) 11 courses, including:

PSY101	General Psychology An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.	3 credits
PSY213	Statistics and Research Design This course is designed to introduce students to essential research tools. Topics include frequency distributions, indices of central tendency, variability, and various inferential statistics, including nonparametric techniques. This course also examines research design procedures with an emphasis on analysis of variance. Priority given to psychology, social work and forensics majors.	3 credits

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY217W Critical Thinking in Psychology 3 credits

In this course, students will use a collection of classic articles from the history of psychology, as well as contemporary psychological research, to develop an understanding of the critical thinking and writing skills used in psychological theory building, research, and the evaluation of research results.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY314W Foundations of Behavioral Research 3 credits

This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.

Pre-requisites Complete the following course:

- PSY213 Statistics and Research Design

PSY490 Integrative Capstone 3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete all 2 of the following courses:

- PSY314W Foundations of Behavioral Research
- PSY213 Statistics and Research Design

1 course in cognition from the following:

PSY307 Cognitive Psychology 3 credits

A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY326	Psychology of Learning	3 credits
<p>An overview of the principles and research associated with modern learning theory. Topics include classical conditioning, operant learning, reinforcement theory, and stimulus control of behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY324	Motivation	3 credits
<p>A survey of concepts and data related to the arousal and direction of behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

1 course in individual differences, personality and social from the following:

PSY323	Personality	3 credits
<p>A survey of individual characteristics from four conceptual strategies: psychoanalytic, dispositional, phenomenological, and behavioral. All conceptual strategies address issues of theory, assessment, research, and personality change. Emphasis is on enduring principles and contemporary issues, illustrated with selected examples and personal application.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY331	Social Psychology	3 credits
<p>An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

PSY333	Abnormal Behavior	3 credits
<p>A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

1 course in biological bases from the following:

PSY230	Animal Behavior	3 credits
	<p>A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology	

PSY340	Psychopharmacology	3 credits
	<p>The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology	

PSY341	Psychobiology	3 credits
	<p>An examination of the biological correlates of behavior. Emphasis is placed on the central nervous system and its structure, organization, and function. Specific topics considered are sleep, learning, memory, sexual behavior, motivation, and complex processes such as thought and language.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology	

PSY342	Addiction	3 credits
	<p>This course will provide a broad dimensional perspective about how the brain and behavior are affected by drugs and other addictive behaviors. Neuroscientific theories of addiction, treatment considerations, biological and personality factors affecting vulnerability to addiction, and prevention strategies will be discussed.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology	

1 developmental course from the following:

PSY351	Childhood and Adolescence	3 credits
	<p>A general introduction to theories and methods of developmental psychology. The course covers patterns and possible mechanisms of behavioral development from conception through adolescence. Audio- and videotapes of infants, children, and their families supplement lectures, discussions, and written exercises. The life-span perspective is continued in PSY 352.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology	

PSY352	Adult Development	3 credits
<p>The periods of adolescence and adulthood are examined through current theories of development. A life cycle perspective is adopted to study physical, cognitive and social/emotional development. Questions of qualitative changes, continuity/discontinuity stages, individual differences and the impact of biological, environmental and cultural factors throughout adulthood are addressed. This course is designed to follow PSY 351, but may be taken as a stand-alone course.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
PSY357	Adolescence & the Transition to Adulthood	3 credits
<p>An in-depth study of the biological, cognitive, and psychosocial aspects of adolescent development and the transition to adulthood (including individuals ages 18-25 years), with a focus on how healthy development during this period can be enhanced by parenting and educational strategies.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

2 additional psychology program electives

****NOTE: PSY251 cannot be used to fulfill any PSY major requirements****

Interdisciplinary Major Requirements

8 courses plus Integrative Capstone Experience

PSY101	General Psychology	3 credits
<p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>		
PSY213	Statistics and Research Design	3 credits
<p>This course is designed to introduce students to essential research tools. Topics include frequency distributions, indices of central tendency, variability, and various inferential statistics, including nonparametric techniques. This course also examines research design procedures with an emphasis on analysis of variance. Priority given to psychology, social work and forensics majors.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
PSY314W	Foundations of Behavioral Research	3 credits
<p>This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.</p>		

Pre-requisites Complete the following course:

- PSY213 Statistics and Research Design

PSY490	Integrative Capstone	3 credits
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The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete all 2 of the following courses:

- PSY314W Foundations of Behavioral Research
- PSY213 Statistics and Research Design

1 course in cognition from the following:

PSY307	Cognitive Psychology	3 credits
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A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY326	Psychology of Learning	3 credits
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An overview of the principles and research associated with modern learning theory. Topics include classical conditioning, operant learning, reinforcement theory, and stimulus control of behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY324	Motivation	3 credits
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A survey of concepts and data related to the arousal and direction of behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

1 course in Individual Differences, Personality, and Social Psychology from the following:

PSY323	<p>Personality</p> <p>A survey of individual characteristics from four conceptual strategies: psychoanalytic, dispositional, phenomenological, and behavioral. All conceptual strategies address issues of theory, assessment, research, and personality change. Emphasis is on enduring principles and contemporary issues, illustrated with selected examples and personal application.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY331	<p>Social Psychology</p> <p>An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY333	<p>Abnormal Behavior</p> <p>A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
1 course in biological bases from the following:		
PSY230	<p>Animal Behavior</p> <p>A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
PSY340	<p>Psychopharmacology</p> <p>The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits

PSY341	Psychobiology	3 credits
<p>An examination of the biological correlates of behavior. Emphasis is placed on the central nervous system and its structure, organization, and function. Specific topics considered are sleep, learning, memory, sexual behavior, motivation, and complex processes such as thought and language.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
PSY342	Addiction	3 credits
<p>This course will provide a broad dimensional perspective about how the brain and behavior are affected by drugs and other addictive behaviors. Neuroscientific theories of addiction, treatment considerations, biological and personality factors affecting vulnerability to addiction, and prevention strategies will be discussed.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
<p>1 developmental course from the following:</p>		
PSY351	Childhood and Adolescence	3 credits
<p>A general introduction to theories and methods of developmental psychology. The course covers patterns and possible mechanisms of behavioral development from conception through adolescence. Audio- and videotapes of infants, children, and their families supplement lectures, discussions, and written exercises. The life-span perspective is continued in PSY 352.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
PSY352	Adult Development	3 credits
<p>The periods of adolescence and adulthood are examined through current theories of development. A life cycle perspective is adopted to study physical, cognitive and social/emotional development. Questions of qualitative changes, continuity/discontinuity stages, individual differences and the impact of biological, environmental and cultural factors throughout adulthood are addressed. This course is designed to follow PSY 351, but may be taken as a stand-alone course.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		
PSY357	Adolescence & the Transition to Adulthood	3 credits
<p>An in-depth study of the biological, cognitive, and psychosocial aspects of adolescent development and the transition to adulthood (including individuals ages 18-25 years), with a focus on how healthy development during this period can be enhanced by parenting and educational strategies.</p> <p>Pre-requisites Complete the following course:</p>		

- PSY101 General Psychology

One additional approved psychology program elective.

****NOTE: PSY251 cannot be used to fulfill any PSY major requirements****

Minor Requirements

6 courses, including:

PSY101	General Psychology	3 credits
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An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.

1 course in cognition from the following:

PSY307	Cognitive Psychology	3 credits
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A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY326	Psychology of Learning	3 credits
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An overview of the principles and research associated with modern learning theory. Topics include classical conditioning, operant learning, reinforcement theory, and stimulus control of behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY324	Motivation	3 credits
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A survey of concepts and data related to the arousal and direction of behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

1 course in individual differences, personality and social from the following:

PSY323	Personality	3 credits
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A survey of individual characteristics from four conceptual strategies: psychoanalytic, dispositional, phenomenological, and behavioral. All conceptual strategies address issues of theory, assessment, research, and personality change. Emphasis is on enduring principles and contemporary issues, illustrated with selected examples and personal

application.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY331 Social Psychology 3 credits

An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY333 Abnormal Behavior 3 credits

A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

1 course in biological bases from the following:

PSY230 Animal Behavior 3 credits

A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY340 Psychopharmacology 3 credits

The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY341 Psychobiology 3 credits

An examination of the biological correlates of behavior. Emphasis is placed on the central nervous system and its structure, organization, and function. Specific topics considered are sleep, learning, memory, sexual behavior, motivation, and complex processes such as thought and language.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY342	Addiction	3 credits
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This course will provide a broad dimensional perspective about how the brain and behavior are affected by drugs and other addictive behaviors. Neuroscientific theories of addiction, treatment considerations, biological and personality factors affecting vulnerability to addiction, and prevention strategies will be discussed.

Pre-requisites Complete the following course:

- PSY101 General Psychology

1 developmental course from the following:

PSY351	Childhood and Adolescence	3 credits
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A general introduction to theories and methods of developmental psychology. The course covers patterns and possible mechanisms of behavioral development from conception through adolescence. Audio- and videotapes of infants, children, and their families supplement lectures, discussions, and written exercises. The life-span perspective is continued in PSY 352.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY352	Adult Development	3 credits
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The periods of adolescence and adulthood are examined through current theories of development. A life cycle perspective is adopted to study physical, cognitive and social/emotional development. Questions of qualitative changes, continuity/discontinuity stages, individual differences and the impact of biological, environmental and cultural factors throughout adulthood are addressed. This course is designed to follow PSY 351, but may be taken as a stand-alone course.

Pre-requisites Complete the following course:

- PSY101 General Psychology

PSY357	Adolescence & the Transition to Adulthood	3 credits
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An in-depth study of the biological, cognitive, and psychosocial aspects of adolescent development and the transition to adulthood (including individuals ages 18-25 years), with a focus on how healthy development during this period can be enhanced by parenting and educational strategies.

Pre-requisites Complete the following course:

- PSY101 General Psychology

One additional approved psychology program elective.

2022-2023 Course Catalog

Social Services Administration (BA)

The mission of the Chatham University undergraduate Social Services Administration program is to prepare students for entry level positions within social service agencies and for graduate study related to public administration, public health, social work, and related fields. The program emphasizes skills and knowledge related to the administration of non-profit agencies and the impact of policy on these agencies.

This major prepares students interested in social services and social policy for entry level administrative positions at social service agencies and for graduate school in public administration, public health, social work or related fields. The administrations of non-profit institutions as well as the impact of social policy on these institutions provide a framework for integrating a foundation of knowledge and skills for a variety of non-profit settings. Students may choose an area of specialization such as criminal justice, or social welfare to focus their coursework including an internship.

Learning Outcomes

At the completion of the major the student will be able to:

1. Describe the relationship between social policies and social services
2. Define basic principles of management as applied to non-profit settings
3. Identify several effective intervention strategies used in social service agencies
4. Explain how funding sources impact the provision of services
5. Demonstrate the use of professional behavior as an intern in a social service setting.

Chatham University Social Services Administration

Falk Hall • Woodland Road • Pittsburgh, PA 15232

Curriculum

Major Requirements

10 courses total, including:

BUS105

Foundations of Business

3 credits

This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.

BUS452	Managing Nonprofit Organizations	3 credits
<p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • BUS105 Foundations of Business Complete all 2 of the following courses: • SWK102 Introduction to Social Work, Social Justice and Social Issues • SWK101 Introduction to Sociology 		
SWK321	Social Welfare and Social Justice	3 credits
<p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>		
INTSSA303	Internship - Social Services Administration	3 credits
<p>Internship - Social Services Administration</p>		
SSA490	Integrative Capstone	3 credits
<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • PSY213 Statistics and Research Design • PSY314W Foundations of Behavioral Research 		
<p>One approved SWK, CRM, or BUS course</p>		
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PSY101	General Psychology	3 credits
<p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>		

OR

SWK102	Introduction to Social Work, Social Justice and Social Issues	3 credits
<p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>		

PSY213	Statistics and Research Design	3 credits
<p>This course is designed to introduce students to essential research tools. Topics include frequency distributions, indices of central tendency, variability, and various inferential statistics, including nonparametric techniques. This course also examines research design procedures with an emphasis on analysis of variance. Priority given to psychology, social work and forensics majors.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PSY101 General Psychology		

OR

MTH110	Elementary Statistics	3 credits
<p>Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.</p>		

OR

BUS110	Business Statistics	3 credits
<p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• BUS105 Foundations of Business		

PSY314W	Foundations of Behavioral Research	3 credits
<p>This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY213 Statistics and Research Design 		

OR

BUS310W	Business Research and Analytics	3 credits
<p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 		

2 courses from the following:

BUS171	Information Systems and Operations	3 credits
<p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>		

BUS230W	Organizational Behavior	3 credits
<p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business 		

BUS257	Business Law and Business Ethics This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.	3 credits
ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
BUS272	Principles of Finance This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms. Pre-requisites Complete the following course: • ACT222 Financial Accounting Principles I	3 credits
CRM101	Introduction to Criminal Justice This course is an introduction to U.S. criminal justice system. Topics covered include the nature of crime, law, justice, police, functions of courts, and the effectiveness of punishment and sanctions. Also explored will be the roles of various professionals in the system to introduce students to potential career paths.	3 credits

SWK224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as CRM 224.	3 credits
OR		
CRM224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as SWK 224.	3 credits

SWK322W	Social Welfare: Women and Policy	3 credits
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This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.

OR

WGS322W	Social Welfare: Women and Policy	3 credits
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This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.

PSY333	Abnormal Behavior	3 credits
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A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.

Pre-requisites Complete the following course:

- PSY101 General Psychology

SWK351	Interviewing and Assessment with Individuals	3 credits
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This course introduces generalist social work practice, including its philosophy, domains, and values. The role of the practitioner and an overview of the helping process provide the foundation for the study and practice of basic interviewing skills.

Pre-requisites Complete the following course:

- SWK102 Introduction to Social Work, Social Justice and Social Issues

POL202W	Understanding Public Policy	3 credits
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This course introduces students to the concepts and tools used in the analysis of public policies, and uses these concepts and tools to examine public policies in the United States and other industrial democracies.

Pre-requisites Complete any 1 of the following courses:

- GOV101 American Government and Public Policy
- POL101 American Government and Public Policy

SWK355	Working with Organizations and Communities	3 credits
<p>The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 		

Minor Requirements

The Social Service Administration minor provides a structured interdisciplinary foundation for understanding the historical roles, importance, and administration of social service and nonprofit organizations in contemporary American society. The minor includes content on the development of social service organizations, the many human needs that they meet and the social problems they address. The minor also provides students with administrative skills and knowledge that will prepare them to work with other professionals in social service and nonprofit organizations.

BUS105	Foundations of Business	3 credits
<p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>		

SWK102	Introduction to Social Work, Social Justice and Social Issues	3 credits
<p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>		

BUS452	Managing Nonprofit Organizations	3 credits
<p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 Foundations of Business <ul style="list-style-type: none"> Complete all 2 of the following courses: • SWK102 Introduction to Social Work, Social Justice and Social Issues • SWK101 Introduction to Sociology 		

SWK321	Social Welfare and Social Justice	3 credits
	<p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	

SWK101	Introduction to Sociology	3 credits
	<p>This course introduces students to the basic sociological concepts, including sociological imagination, socialization, social institutions, social stratification, and social inequality. Emphasis is placed on conceptual tools necessary for the analysis of the influence of social structures on human behavior and life chances.</p>	

OR

PSY101	General Psychology	3 credits
	<p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>	

One of the following:

BUS171	Information Systems and Operations	3 credits
	<p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	

BUS230W	Organizational Behavior	3 credits
	<p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• BUS105 Foundations of Business	

BUS257	Business Law and Business Ethics This course introduces students to the introductory concepts of business law including employment law, social and environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.	3 credits
ACT222	Financial Accounting Principles I This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).	3 credits
BUS272	Principles of Finance This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ACT222 Financial Accounting Principles I 	3 credits
SWK322W	Social Welfare: Women and Policy This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.	3 credits
SWK351	Interviewing and Assessment with Individuals This course introduces generalist social work practice, including its philosophy, domains, and values. The role of the practitioner and an overview of the helping process provide the foundation for the study and practice of basic interviewing skills. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
INTSSA303	Internship - Social Services Administration Internship - Social Services Administration	3 credits
SWK355	Working with Organizations and Communities The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.	3 credits

Pre-requisites Complete the following course:

- SWK102 Introduction to Social Work, Social Justice and Social Issues

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Social Work (BSW)

The social work program offers a major in social work leading to a Bachelor of Social Work (B.S.W.) degree that is accredited by the Council on Social Work Education. A liberal arts foundation is an integral part of an undergraduate social work education and provides an essential context for understanding human behavior. The B.S.W. prepares students for entry level generalist social work practice as well as graduate education in social work and related fields. Bachelor level social workers are employed in all areas of human services and health care. They are also eligible for advanced standing in graduate programs in social work.

Students who are interested in pursuing a social work major may declare a social work major at any time by completing the major declaration form available from the University Registrar or on-line. Social work majors must also apply for 12-credit field placement completed during the senior year. This process is required to help ensure that students possess both the academic ability and personal maturity necessary for beginning social work practice. To apply for admission to the field placement, students be at least a first semester junior, have an overall GPA of 2.25 and a C- or higher in all social work courses. Specifics of the application process may be obtained from any member of the social work faculty.

Learning Outcomes

Upon successful completion of the major, students will be able to:

1. Demonstrate Ethical and Professional Behavior Competency
2. Engage Diversity and Difference in Practice Competency
3. Advance Human Rights and Social, Economic, and Environmental Justice Competency
4. Engage In Practice-informed Research and Research-informed Practice Competency
5. Engage in Policy Practice Competency
6. Engage with Individuals, Families, Groups, Organizations, and Communities Competency
7. Assess Individuals, Families, Groups, Organizations, and Communities Competency
8. Intervene with Individuals, Families, Groups, Organizations, and Communities Competency
9. Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities

ASSESSMENT OF STUDENT LEARNING OUTCOMES LAST COMPLETED ON April 2018

Form AS4 (B) Duplicate and expand as needed. Provide table(s) to support self -study narrative addressing the accreditation standards below.

This form is used to assist the COA in the evaluation of the program's compliance with the accreditation standards below:

4.0.2 The program provides its most recent year of summary data and outcomes for the assessment of each

of the identified competencies, specifying the percentage of students achieving program benchmarks for each program option.

4.0.3 The program uses Form AS 4(B) and/or Form AS 4(M) to report its most recent assessment outcomes for each program option to constituents and the public on its website and routinely up-dates (minimally every 2 years) its findings.

All Council on Social Work Education programs measure and report student learning outcomes. Students are assessed on their mastery of the competencies that comprise the accreditation standards of the Council on Social Work Education. These competencies are dimensions of social work practice that all social workers are expected to master during their professional training. A measurement benchmark is set by the social work programs for each competency. An assessment score at or above that benchmark is considered by the program to represent mastery of that particular competency.

**ASSESSMENT OF STUDENT LEARNING OUTCOMES
LAST COMPLETED ON April 2018**

COMPETENCY	COMPETENCY BENCHMARK	PERCENTAGE OF STUDENTS ACHIEVING BENCHMARK
	90=Mastered 70=Superior 50=Competent 30=Inadequate 10=Lacking Performance	AY 2017-2018 N=5
Competency 1: Demonstrate Ethical and Professional Behavior	M = 65.71	100%
Competency 2: Engage Diversity and Difference in Practice	M = 63.33	100%
Competency 3: Advance Human Rights and Social, Economic, and Environmental Justice	M = 60.0	100%
Competency 4: Engage In Practice-informed Research and Research-informed Practice	M = 40.0	40%
Competency 5: Engage in Policy Practice	M = 48.57	60%
Competency 6: Engage with Individuals, Families, Groups, Organizations, and Communities	M = 68.0	80%
Competency 7: Assess Individuals, Families, Groups, Organizations, and Communities	M = 88.0	100%
Competency 8: Intervene with Individuals, Families, Groups, Organizations, and Communities	M = 76	100%
Competency 9: Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities	M = 60	80%

Curriculum

Major Requirements

PSY101	<p>General Psychology</p> <p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>	3 credits
PSY314W	<p>Foundations of Behavioral Research</p> <p>This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY213 Statistics and Research Design 	3 credits
SWK101	<p>Introduction to Sociology</p> <p>This course introduces students to the basic sociological concepts, including sociological imagination, socialization, social institutions, social stratification, and social inequality. Emphasis is placed on conceptual tools necessary for the analysis of the influence of social structures on human behavior and life chances.</p>	3 credits
SWK102	<p>Introduction to Social Work, Social Justice and Social Issues</p> <p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>	3 credits
SWK201W	<p>Human Behavior in the Social Environment I</p> <p>This course examines the development of individuals, couples, and families from birth to death within the framework of relevant biological, psychological, sociological, and social work research and theory.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits

SWK321	<p>Social Welfare and Social Justice</p> <p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	3 credits
SWK322W	<p>Social Welfare: Women and Policy</p> <p>This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.</p>	3 credits
SWK351	<p>Interviewing and Assessment with Individuals</p> <p>This course introduces generalist social work practice, including its philosophy, domains, and values. The role of the practitioner and an overview of the helping process provide the foundation for the study and practice of basic interviewing skills.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
SWK352	<p>Interventions with Individuals and Families</p> <p>Building on the knowledge and skills acquired in Social Work 351, this course focuses on direct practice with individuals and families, including the assessment, middle, and termination phases of social work practice. Skills for working with diverse populations will be illustrated and practiced using videos and role playing.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
SWK354	<p>Working with Groups</p> <p>This course examines the essential components of generalist social work practice with groups. Topics include group typology, formation, development, and processes. Strategies for effective leadership with small and large groups are explored using both didactic and experiential methods.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
SWK355	<p>Working with Organizations and Communities</p> <p>The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits

SWK490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • PSY213 Statistics and Research Design • PSY314W Foundations of Behavioral Research 	3 credits
12 credits of field placement from the following:		
SWK451A	Field Placement I Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement. Pre-requisites Complete all 3 of the following courses: <ul style="list-style-type: none"> • SWK352 Interventions with Individuals and Families • SWK354 Working with Groups • SWK355 Working with Organizations and Communities 	1 credits
SWK451B	Field Placement II Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement. Pre-requisites Complete all 3 of the following courses: <ul style="list-style-type: none"> • SWK352 Interventions with Individuals and Families • SWK354 Working with Groups • SWK355 Working with Organizations and Communities 	2 credits
SWK451C	Field Placement III Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement. Pre-requisites Complete all 3 of the following courses: <ul style="list-style-type: none"> • SWK352 Interventions with Individuals and Families • SWK354 Working with Groups • SWK355 Working with Organizations and Communities 	3 credits

SWK451D	Field Placement IV	4 credits
<p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 Interventions with Individuals and Families • SWK354 Working with Groups • SWK355 Working with Organizations and Communities 		

SWK451E	Field Placement V	5 credits
<p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 Interventions with Individuals and Families • SWK354 Working with Groups • SWK355 Working with Organizations and Communities 		

Minor Requirements

This minor is intended for students who are interested in exploring the field of social work for further study. It does not prepare a student for professional social work practice. Instead, it can be used to understand the field of social work and explore professional careers within the field. 18 credits

SWK102	Introduction to Social Work, Social Justice and Social Issues	3 credits
<p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>		

SWK201W	Human Behavior in the Social Environment I	3 credits
<p>This course examines the development of individuals, couples, and families from birth to death within the framework of relevant biological, psychological, sociological, and social work research and theory.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 		

OR

SWK202	<p>Human Behavior in the Social Environment II</p> <p>This course is a continuation of SWK 201W. It examines the development of individuals, couples, and families from adolescence to death within social work research and theory. Also explored are systems that influence gender, race, ethnicity, social, and economic influences within the context of families, groups, organizations, institutions, and communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK201W Human Behavior in the Social Environment I 	3 credits
SWK321	<p>Social Welfare and Social Justice</p> <p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	3 credits
OR		
SWK322W	<p>Social Welfare: Women and Policy</p> <p>This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.</p>	3 credits
SWK351	<p>Interviewing and Assessment with Individuals</p> <p>This course introduces generalist social work practice, including its philosophy, domains, and values. The role of the practitioner and an overview of the helping process provide the foundation for the study and practice of basic interviewing skills.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
SWK352	<p>Interventions with Individuals and Families</p> <p>Building on the knowledge and skills acquired in Social Work 351, this course focuses on direct practice with individuals and families, including the assessment, middle, and termination phases of social work practice. Skills for working with diverse populations will be illustrated and practiced using videos and role playing.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits

OR

SWK354	Working with Groups	3 credits
<p>This course examines the essential components of generalist social work practice with groups. Topics include group typology, formation, development, and processes. Strategies for effective leadership with small and large groups are explored using both didactic and experiential methods.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• SWK102 Introduction to Social Work, Social Justice and Social Issues		

OR

SWK355	Working with Organizations and Communities	3 credits
<p>The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none">• SWK102 Introduction to Social Work, Social Justice and Social Issues		

Elective social work (SWK) course at the 200 or 300 level

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Sustainability (BA/BS)

The Bachelor of Sustainability major provides an intellectual and experiential core in sustainability and the ability to specialize in one of three tracks of study.

Admission Requirements

Admission to Chatham University is determined by the candidate's academic record, promise as a student at Chatham, and commitment to continued personal growth. Chatham gives preference to students that come from a strong college preparatory background. Chatham encourages a minimum of four years of English, three years of mathematics, three years of science, and three years of social science. The meeting of minimum requirements itself does not ensure admission to Chatham. Acceptance is contingent upon a candidate's completion of secondary school requirements and is based on careful review of all credentials presented by the candidate.

First-year student applicants (applicants entering directly from high school, without enrolling in prior post-secondary course work, other than courses completed while attending high school) must submit the following:

- Completed [application for admission](#)
- SAT (Chatham code: 2081) or ACT (Chatham Code: 3538) scores
- Essay or writing sample
- One or more letters of recommendation from guidance counselor or teachers.

Students may apply using our SAT optional policy and choose not to submit their SAT scores at the time of application. If not submitting their scores, in addition to the required application materials, applicants must submit the following:

- Résumé
- Graded academic writing sample
- Complete an on campus interview
- Portfolio (optional)

If an applicant feels that these materials do not adequately represent his or her academic abilities or explain his or her academic history, the student is encouraged to submit additional explanatory materials to strengthen the application.

Further, prospective students are strongly encouraged to arrange for a [personal tour of campus and meet with an Admission Counselor](#). Campus tours are available Monday through Friday at 10 a.m., 12 p.m., and 2 p.m. and on select Saturdays throughout the year (please contact The Office of Admission for upcoming dates). If it is not possible to schedule a campus visit, prospective students should contact the Office of Admission to schedule an interview with an alumni representative in their area.

Learning Outcomes

- Students are able to develop and explain a personal sustainability mission statement.
- Students are able to demonstrate and model the socio-ecological determinants of complex systems.
- Students are able to explain a holistic and integrated perspective on socio-ecological systems.
- Students develop ethical transformative leadership practices, including creative solutions and strategies, in multiple contexts and at multiple scales.
- Students can explain production and consumption of major material and energy resources, in multiple contexts and at multiple scales.
- Students can explain the history and current usage(s) of the term “sustainability”, and demonstrate how it can be assessed in public, private, and not-for-profit contexts.
- Students apply best practices for global, national, regional, interpersonal, and personal decision making, including accessing appropriate sources and types of knowledge, and strategically managing uncertainty.
- Students explain the relationship between environmental and human wellbeing, and explain how they change over time.

Curriculum

BA/BS in Sustainability

Required Core Courses for all tracks BA/ BS 27 credits

SUS100	Sustainability Science Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and impacts of those land uses, and the implications for environmental wellbeing.	3 credits
SUS102	Sustainability and Society Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.	3 credits
SUS201	Integrative Biology This course will introduce traditional biological concepts from molecules to organisms within an integrative and applied framework. Students will learn the interdisciplinary nature and common approaches of biology through applied topics relevant to sustainability such as human and ecological health, freshwater and marine fisheries, energy sources, and climate dynamics.	3 credits

SUS201L	Integrative Biology Lab Laboratory exercises including data collection, small-scale experimentation, data modeling, and simulation will be experienced to complement the material covered in SUS 201. Two hours of laboratory will be held per week at the Eden Hall Campus aquatic science lab. Additional Fee(s): Laboratory fees = \$50.	1 credits
SUS202	Dynamic Earth Systems The earth is a dynamic, evolving system. This course provides an introduction to earth's formation, its materials composition and distribution, and the processes of the lithosphere, atmosphere, hydrosphere, and biosphere that interact to shape surface and subsurface features and conditions. The complex adaptive systems framework will be applied.	3 credits
SUS210	Sustainability and Technology This course discusses opportunities and challenges for using technology for sustainability. We will discuss innovation for sustainability and societal adoption, and will explore ways to use renewable energy and other technologies for homes and workplaces, the internet of Things, closed loops and new materials, sustainable transportation, and smart water systems.	3 credits
SUS327W	Writing about Environmental Science This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENV327W.	3 credits
SUS350	Skills for Sustainability Professionals This course promotes professional skills development for careers in the field of sustainability including career exploration, networking, job searching, application materials, and interviewing skills. Other topics include practical skills for presentations and small project recognition and development. Pre-requisites Complete the following course: • SUS201 Integrative Biology	2 credits
SUS352	GIS Software - Skills and Applications A Geographic Information Systems (GIS) software is a powerful tool used in a variety of disciplines. Students will gain a foundation of GIS principles and applications using ArcGIS software. Topics covered include data development and management, spatial analysis techniques, communicating data visually and examples of hands-on GIS applications.	3 credits

SUS380	<p>Economics in a Changing World</p> <p>An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • SUS102 Foundations of Sustainability • SUS102 Sustainability and Society 	3 credits
SUS401	<p>Sustainability Policy and Decision Making</p> <p>This course examines contrasting rationales supporting environmental values and human interests that compete against those values; the enactment and mechanics of regulations and statutes; environmental economics and politics. The socio-economic, legal and political implications will be scrutinized through case studies of local and/or global environmental and ecological concern.</p>	3 credits
SUS416	<p>Sustainable Decision Analysis</p> <p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>	3 credits
FST320	<p>Basic Agroecology</p> <p>Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	3 credits
FST320L	<p>Growing Sustainably Lab</p> <p>Through working with Chatham's Eden Hall Farm as well as visiting neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in classes. Topics will include basic principles of soil fertility, biodiversity, greenhouse production, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	1 credits
SUS490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must</p>	3 credits

have the approval of both academic programs.

INTSUS303	Internship - Sustainability Internship - Sustainability	3 credits
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MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.	3 credits
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OR

BUS110	Business Statistics This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BUS105 Foundations of Business	3 credits
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Natural Resource Management Track

17 credits

The natural resources management track provides students with a broad-based understanding of the interconnectedness of ecological, economic, social and political, systems. The track introduces students to a wide range of renewable natural resources, their use and management. It combines professional competency in management skills with a strong foundation in the biophysical, social and economic fields. For this track there are three required courses (including the labs) and two electives.

Track Requirements - 11 Credits

SUS322	Natural Resource Management Policy and Law Contemporary natural resource management policy issues are addressed emphasizing domestic policy solutions. Major initiatives and implementation toward sustainable resource use and healthy environments are discussed and analyzed to determine implementation strategy success levels, to assess adequacy within bioregional/ecosystem approaches, and to integrate economic and environmental decisions. Local site visit(s) expected.	3 credits
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Pre-requisites Complete any 1 of the following courses:

- SUS102 Sustainability and Society
- SUS102 Foundations of Sustainability

SUS404	Quantitative Ecology Drawing from case studies in landscape design and natural resource management, this course will apply quantitative methods to ecological data analysis. Students will work with the software program R to apply statistical inference and mathematical modeling using previously collected data sets on single species, species interactions, communities, and food webs.	3 credits
SUS404L	Quantitative Ecology Laboratory Laboratory exercises from this course will complement material covered in SUS 404. Activities will primarily involve data collection and retrieval in ecosystems surrounding Eden Hall and in the Laurel Highlands. Additional fees: \$50 laboratory fee. Co-requisites <ul style="list-style-type: none">• SUS404 Quantitative Ecology	1 credits
CHM102	Chemistry in Context One semester lecture course with selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological and environmental issues. Topics include matter, energy, atomic and molecular structure, bonding, reaction chemistry, and radioactivity. Three hours of lecture per week. Not open to majors in biology or chemistry.	3 credits
CHM102L	Chemistry in Context Lab One semester laboratory course to accompany CHM102 Chemistry in Context. Two hours of lab per week. Not open to majors in biology or chemistry.	1 credits

Track Electives (Choose Two) - 6 Credits

SUS203W	Global Environmental Health This course addresses the connection between health and environment. Topics include: environmental epidemiology, toxicology, policy, radiation and energy disease, and water, air, soil qualities. The work of scientists and public health specialists to discover, assess, and reduce risk to environment health problems are explored. Case studies provide context and background for environmental health issues past and present. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• SUS100 Sustainable Systems• SUS100 Sustainability Science• SUS201 Integrative Biology• BIO144 The Organism	3 credits
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SUS301	Global Change Science	3 credits
	<p>The climate system of Earth is rapidly changing due to complex and interacting phenomena. This course offers an in-depth investigation of the science behind climate change, including a survey of model forecasts. Emphasis will also include the current and projected consequences of climate change on natural resources.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENV116 Global Environmental Challenges • SUS202 Dynamic Earth Systems 	
SUS355	Forestry	3 credits
	<p>This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the Eden Hall woodland.</p>	
SUS461	Aquatic Entomology	3 credits
	<p>Aquatic environments harbor a vast number of insect species that are widely used as biological indicators of environmental health. This course introduces the physiological, ecological, and biomonitoring attributes of aquatic insects and emphasizes taxonomic identification. Preparation for a formal identification certification test from the Society for Freshwater Science is optional.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 Integrative Biology <ul style="list-style-type: none"> Complete all 2 of the following courses: • BIO143 The Cell • BIO144 The Organism 	

Sustainable Energy and Urban Systems Track

15 credits

The sustainable technology track provides students with a broad-based understanding of the interconnectedness of social, ecological and technological systems. The track introduces students to a wide range of renewable energy technologies and systems, and explores the relationship between technological, social and policy change, particularly in the context of the sustainable cities of the future. For this track there are three required courses (including the labs) and two electives.

Track Requirements - 9 credits

SUS335	Renewable Energy and Society	3 credits
	<p>This course explores the relationship of energy production and consumption with sustainability. Non-renewable and renewable energy resources and their environmental and social impacts will be discussed. We will explore the Eden Hall energy systems and investigate in more detail how solar energy could be used on a larger scale.</p>	

SUS460	Energy Policy for Sustainability	3 credits
<p>This course explores the history, challenges, and opportunities of energy policy. Policymakers must consider disruptive innovations, volatile markets, climate change, and economic instability while balancing diverse goals collaboratively and holistically. The course equips students with tools and considerations to craft sustainable energy policy for reliable and affordable energy systems.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy • SUS335 Renewable Energy and Society 		
IAR231	Green & Sustainable Design	3 credits
<p>Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the Environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.</p>		
Track Electives (Choose Two) - 6 credits		
SUS330	Sustainable Cities	3 credits
<p>This course will explore sustainability with a focus on the urban built environment. We will investigate both American and international issues of landownership, neighborhood development, housing, public spaces, and building technology. The course will incorporate lectures, readings, site visits, case studies, and a project using Pittsburgh as an investigatory vehicle.</p>		
SUS435	Green and Social Innovation	3 credits
<p>Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.</p>		
SUS436	Sustainable Energy Applications	3 credits
<p>This class explores the energy service sector and integration of renewable energy into the energy system. Topics include strategies for electric utilities in today's changing environment, community energy systems and micro-grids, the role of renewable energy for business strategies, energy services, and energy deficiency and storage.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS310W Business Analytics: Research Methods • BUS243 Principles of Marketing • SUS335 Renewable Energy and Society 		

CMP120	Introduction to Programming	3 credits
	An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.	

CMP283	Database Management Systems	3 credits
	This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.	

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

BUS171	Information Systems and Operations	3 credits
	This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.	

Sustainable Business Track

15 credits

The sustainable business and management track helps students to understand how business can help solve sustainability problems. The track exposes students to analytical concepts and tools for decision making. At the same time students are encouraged to think broadly about the impacts of business decisions. The track includes traditional business classes, an introduction sustainable technology, approaches to decision analysis and corporate social responsibility. For this track there are three required courses (including the labs) and two electives.

Track Requirements - 9 credits

SUS435	Green and Social Innovation	3 credits
	Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.	

SUS470	Corporate Social Responsibility (CSR)	3 credits
	This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.	
BUS105	Foundations of Business	3 credits
	This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.	
Track Electives (Choose Two) - 6 Credits		
SUS330	Sustainable Cities	3 credits
	This course will explore sustainability with a focus on the urban built environment. We will investigate both American and international issues of landownership, neighborhood development, housing, public spaces, and building technology. The course will incorporate lectures, readings, site visits, case studies, and a project using Pittsburgh as an investigatory vehicle.	
SUS335	Renewable Energy and Society	3 credits
	This course explores the relationship of energy production and consumption with sustainability. Non-renewable and renewable energy resources and their environmental and social impacts will be discussed. We will explore the Eden Hall energy systems and investigate in more detail how solar energy could be used on a larger scale.	
SUS436	Sustainable Energy Applications	3 credits
	This class explores the energy service sector and integration of renewable energy into the energy system. Topics include strategies for electric utilities in today's changing environment, community energy systems and micro-grids, the role of renewable energy for business strategies, energy services, and energy deficiency and storage. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BUS310W Business Analytics: Research Methods • BUS243 Principles of Marketing • SUS335 Renewable Energy and Society 	
BUS243	Principles of Marketing	3 credits
	This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.	

CMP283 Database Management Systems**3 credits**

This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.

Pre-requisites Complete any 1 of the following courses:

- CMP202 Introduction to Programming
- CMP120 Introduction to Programming

Self-Designed Track

Track Requirements (Choose three) - 9 credits

Choose from any three sustainability (SUS) or Food System (FST) classes which are not part of the core sustainability degree requirements.

Track Electives (Choose two) - 6 credits

Choose any two 300 or 400 level class from any discipline which are not part of the core BSUS or General Education requirements.

BSUS - Interdisciplinary Major

Students pursuing an interdisciplinary major in sustainability, twinned with any other related major offering a similar interdisciplinary option, will explore society's sustainability challenges and focus on data driven and entrepreneurial solutions, through a range of environmental, social, business and food system courses.

The interdisciplinary major consists of 24 credit hours (8 courses), exclusive of the integrated senior capstone. The capstone must integrate the subject matter of the two majors. A student perusing an interdisciplinary major must obtain the specific supported by a full-time faculty member who has agreed to advise the student and direct their program, particularly in the interrelations of the subjects to be studied. At least 50% of the credits toward the major must be completed at Chatham. A student must earn a G.P.A. of 2.0 or above within their major. Courses within the major with a recorded grade below C- must be repeated. Students must take the following courses to fulfill the integrated degree requirement for Sustainability: Up to two of these courses may be submitted with other SUS courses, provided the student gets the express permission of the Dean of the Falk School.

SUS100	Sustainability Science Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and impacts of those land uses, and the implications for environmental wellbeing.	3 credits
SUS102	Sustainability and Society Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.	3 credits
SUS202	Dynamic Earth Systems The earth is a dynamic, evolving system. This course provides an introduction to earth's formation, its materials composition and distribution, and the processes of the lithosphere, atmosphere, hydrosphere, and biosphere that interact to shape surface and subsurface features and conditions. The complex adaptive systems framework will be applied.	3 credits
SUS380	Economics in a Changing World An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • SUS102 Foundations of Sustainability • SUS102 Sustainability and Society 	3 credits
SUS401	Sustainability Policy and Decision Making This course examines contrasting rationales supporting environmental values and human interests that compete against those values; the enactment and mechanics of regulations and statutes; environmental economics and politics. The socio-economic, legal and political implications will be scrutinized through case studies of local and/or global environmental and ecological concern.	3 credits
SUS416	Sustainable Decision Analysis The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.	3 credits

SUS330	Sustainable Cities	3 credits
<p>This course will explore sustainability with a focus on the urban built environment. We will investigate both American and international issues of landownership, neighborhood development, housing, public spaces, and building technology. The course will incorporate lectures, readings, site visits, case studies, and a project using Pittsburgh as an investigatory vehicle.</p>		

SUS335	Renewable Energy and Society	3 credits
<p>This course explores the relationship of energy production and consumption with sustainability. Non-renewable and renewable energy resources and their environmental and social impacts will be discussed. We will explore the Eden Hall energy systems and investigate in more detail how solar energy could be used on a larger scale.</p>		

Minor in Sustainable Natural Resource Management

Students pursuing a minor in Sustainable Natural Resource Management will explore society's sustainability challenges and focus on data driven management of the natural environment.

SUS100	Sustainability Science	3 credits
<p>Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and impacts of those land uses, and the implications for environmental wellbeing.</p>		

SUS301	Global Change Science	3 credits
<p>The climate system of Earth is rapidly changing due to complex and interacting phenomena. This course offers an in-depth investigation of the science behind climate change, including a survey of model forecasts. Emphasis will also include the current and projected consequences of climate change on natural resources.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENV116 Global Environmental Challenges • SUS202 Dynamic Earth Systems 		

SUS322	Natural Resource Management Policy and Law	3 credits
<p>Contemporary natural resource management policy issues are addressed emphasizing domestic policy solutions. Major initiatives and implementation toward sustainable resource use and healthy environments are discussed and analyzed to determine implementation strategy success levels, to assess adequacy within bioregional/ecosystem approaches, and to integrate economic and environmental decisions. Local site visit(s) expected.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • SUS102 Sustainability and Society • SUS102 Foundations of Sustainability 		

SUS426	Sustainable Aquaculture	3 credits
<p>This course examines the historical development and cultural importance of aquaculture, as well as practical considerations for managing modern aquaculture systems. Emphasis is on low-impact aquaculture systems and approaches, which minimize adverse environmental impacts, and encourage socially responsible development that enhances both the natural resource base and community livelihoods.</p>		

SUS355	Forestry	3 credits
<p>This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the Eden Hall woodland.</p>		

Minor in Sustainable Energy and Urban Systems

Students pursuing a minor in Sustainable Energy and Urban Systems will explore society's sustainability challenges focusing on the urban environment and approaches to making cities more resilient and sustainable, along with the growing economic focus on renewable energy.

SUS100	Sustainability Science	3 credits
<p>Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and impacts of those land uses, and the implications for environmental wellbeing.</p>		

SUS210	Sustainability and Technology	3 credits
<p>This course discusses opportunities and challenges for using technology for sustainability. We will discuss innovation for sustainability and societal adoption, and will explore ways to use renewable energy and other technologies for homes and workplaces, the internet of Things, closed loops and new materials, sustainable transportation, and smart water systems.</p>		

SUS330	Sustainable Cities	3 credits
<p>This course will explore sustainability with a focus on the urban built environment. We will investigate both American and international issues of landownership, neighborhood development, housing, public spaces, and building technology. The course will incorporate lectures, readings, site visits, case studies, and a project using Pittsburgh as an investigatory vehicle.</p>		

SUS355	Forestry	3 credits
<p>This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the</p>		

SUS436	Sustainable Energy Applications	3 credits
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This class explores the energy service sector and integration of renewable energy into the energy system. Topics include strategies for electric utilities in today's changing environment, community energy systems and micro-grids, the role of renewable energy for business strategies, energy services, and energy deficiency and storage.

Pre-requisites Complete any 1 of the following courses:

- BUS310W Business Analytics: Research Methods
- BUS243 Principles of Marketing
- SUS335 Renewable Energy and Society

Minor in Sustainable Business Studies

Students pursuing a minor in Sustainable Business Studies will explore society's challenges focusing on the business environment and the push to make businesses more socially responsible and sustainable.

SUS102	Sustainability and Society	3 credits
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Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.

SUS355	Forestry	3 credits
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This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the Eden Hall woodland.

SUS380	Economics in a Changing World	3 credits
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An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues.

Pre-requisites Complete any 1 of the following courses:

- SUS102 Foundations of Sustainability
- SUS102 Sustainability and Society

SUS435	Green and Social Innovation	3 credits
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Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.

SUS470	Corporate Social Responsibility (CSR)	3 credits
<p>This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.</p>		

Minor in Sustainability and Society

Students pursuing a minor in Sustainability and Society will explore society's sustainability challenges and focus on data driven community and entrepreneurial solutions. Requirements 15 credits (5 required courses).

SUS100	Sustainability Science	3 credits
<p>Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and impacts of those land uses, and the implications for environmental wellbeing.</p>		

SUS102	Sustainability and Society	3 credits
<p>Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.</p>		

SUS327W	Writing about Environmental Science	3 credits
<p>This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENV327W.</p>		

SUS380	Economics in a Changing World	3 credits
<p>An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • SUS102 Foundations of Sustainability • SUS102 Sustainability and Society 		

SUS435

Green and Social Innovation

3 credits

Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.

2022-2023 Course Catalog

Visual Arts (Art History, Studio Arts) (BA)

The Visual Arts major is designed to prepare students to create, analyze, and critique visual art in a complex, rapidly changing global culture. The mission of the major is to empower students through the integration of technical applications and critical theories, to provide students with marketable skills, to assume creative, scholarly, and leadership roles in the visual arts field, and to promote an understanding of the role that the visual arts play in all facets of contemporary life. Concentrations are available in: Studio Arts and Art History.

Students must earn a C- or better in all major courses. Failure to earn this minimum grade will result in the need to repeat the course thereby possibly extending the student's course of study beyond four years.

Learning Outcomes

B.A. in Visual Arts, Studio Concentration

College-Wide Goals & Objectives

This section explains how the Visual Arts, Studio Concentration Major meets the overarching objectives at Chatham University.

1. Information Literacy

- a. Students must effectively locate and gather information for research and medium-related analysis through a variety of information media.
- b. Students must be able to properly evaluate the quality of the information and its sources.
- c. Students must utilize their knowledge gathered from various media sources to render well-communicated, designed and conceptualized projects and/or research papers in response to their contextual analysis.

2. Critical Reading

- a. Students must evaluate art and theories related to critical visual studies through a combination of written and online texts, hand-outs, journal articles, art shows in galleries and museums, artist discussions and in-class lectures, conversations and demonstrations.
- b. Students must assess the quality of gathered and presented information as well as its sources.

3. Analytical Thinking

- a. Students must critically investigate and respond to the work of other artists, and theorists as well as the work of their peers during critique sessions.
- b. Students must look for multidisciplinary relationships between art, studio practice and other fields of research, examining the role of the artist as well as art works within a broader social context.
- c. Students must exhibit a critical understanding of related technical concerns, representational

issues, aesthetic practices, ideas and concepts through original projects and/or papers.

4. Problem Solving

- a. Students must transform critical and analytical research into well-conceptualized projects and informed responses.
- b. Students must be able to move from concept to project actualization.
- c. Students must have a strong understanding of technique in order to properly troubleshoot and solve conceptual and creative issues related to a project.

5. Public Written Communication

- a. Students must communicate clearly by writing research or response papers of various lengths, which support coursework requirements.
- b. Students must communicate their conceptual and creative concepts clearly in written project statements.
- c. Students must formulate a point of view and be able to defend it within the written format.

6. Public Oral Communication

- a. Students must communicate ideas clearly in oral presentations.
- b. Students must actively participate in classroom discussions and group critique sessions.
- c. Students must formulate a point of view and be able to defend it orally.

Program-Specific Goals & Objectives

This section explains the discipline-specific goals and objectives of Visual Arts, Studio Concentration major.

1. Media Literacy, Analysis and Context

- a. Students must have a historical understanding of the medium they are using and the ideas they are pursuing in their creative work.
- b. Students must be aware of major theories influencing the art field.
- c. Students must develop original and well-informed responses to theoretical and critical analysis.
- d. Students must look for interdisciplinary relationships between art, art history, and other fields of research.

2. Creative Processes

- a. Students must develop and transform original concepts into well-conceptualized projects – demonstrating a competency in project development.
- b. Students must choose appropriate medium for the development of their project and/or idea through models, sketches, proposals, and aesthetic choices.
- c. Students must communicate their creative expression through project presentation at various stages of development.

3. Technical Fundamentals

- a. Students must have knowledge of the medium they are utilizing for their projects.
- b. Students must create original projects that draw on their knowledge of the medium in order to thoroughly investigate relationships between concept development and media used.
- c. Students must properly troubleshoot and solve medium-related problems.

4. Professional Practice

- a. Students must develop projects with an understanding of a diversified audience.
- b. Students must properly document their projects, choosing appropriate forms of media
- c. Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution or field contribution.
- d. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- e. Students must develop attitudes of professional responsibility and accountability.
- f. Students must develop professional discipline (time-management, organizational skills).

Curriculum

Major Requirements

ART103	Intro to Visual Culture Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.	3 credits
ART117	Drawing I Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.	3 credits
ART132	History of World Art II: 1400 to Present This introductory survey focuses on Western art from the Renaissance to today and the art of selected non-Western cultures (including Japan, Africa, and Islamic countries) after 1400. It concentrates on the stylistic, technical, and expressive evolution of painting, architecture, and sculpture within specific historical contexts, yet also explores the cross-influences and interaction of non-Western and Western art as defining characteristics of the modern world.	3 credits

ART230W	Women and Art Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.	3 credits

ART490	Integrative Capstone	3 credits
<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • FDT300W Critical Theory 		

Studio Arts Concentration

ART111	Ceramics I	3 credits
<p>This studio course provides students with an introduction to ceramic processes and materials. Instruction in beginning wheel-throwing methods augments competency in basic construction and surface application techniques. Projects focus on development of form and surface in ceramics, as well as exposure to historical and contemporary issues specific to the medium. Additional Fee(s): Applied art fee.</p>		
ART115	Painting I	3 credits
<p>This course introduces the student to basic principles of painting and two-dimensional thinking and expression. Drawing skills, color theory, stretcher construction, and a general understanding of visual art concepts accompany each assignment. Additional Fee(s): Applied art fee.</p>		
ART127	Printmaking I	3 credits
<p>This course is an introduction to the techniques and aesthetics of graphic media, including dry point, engraving, mezzotint, etching, and aquatint. Additional Fee(s): Applied art fee.</p>		
ART205	Sculpture Studio	3 credits
<p>This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.</p>		

One Advanced 2D Studio:

ART215 Painting Studio **3 credits**

This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART115 Painting I

ART315 Painting Studio **3 credits**

This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART115 Painting I

ART415 Painting Studio **3 credits**

This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART315 Painting Studio

OR

ART227 Printmaking Studio **3 credits**

This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART127 Printmaking I

ART327 Printmaking Studio **3 credits**

This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART127 Printmaking I

ART427 Printmaking Studio **3 credits**

This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART127 Printmaking I

OR

ART217 Drawing Studio **3 credits**

This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART117 Drawing I

ART317 Drawing Studio **3 credits**

This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART117 Drawing I

ART417 Drawing Studio **3 credits**

This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized.. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART117 Drawing I

One Advanced 3D Studio:

ART211 Ceramics Studio **3 credits**

This studio course advances the student in all technical aspects of ceramics and explores conceptual, critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART111 Ceramics I

ART311 Ceramics Studio **3 credits**

This studio course advances the student in all technical aspects of ceramics and explores conceptual and critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART211 Ceramics Studio

ART411 Ceramics Studio **3 credits**

This studio course advances the student in all technical aspects of ceramics and explores conceptual, critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART311 Ceramics Studio

OR

ART205 Sculpture Studio **3 credits**

This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.

ART305 Sculpture Studio **3 credits**

This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART205 Sculpture Studio

ART405 Sculpture Studio **3 credits**

This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART305 Sculpture Studio

OR

ART220	Material Studies Studio	3 credits
<p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p>		
ART320	Material Studies Studio	3 credits
<p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ART220 Material Studies Studio 		
ART420	Material Studies Studio	3 credits
<p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ART320 Material Studies Studio 		

Studio Arts Minor

Five courses:

ART117	Drawing I	3 credits
<p>Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.</p>		
ART214	Design Studio	3 credits
<p>This course is an introduction to the visual grammar of dynamic composition and form. In this studio course the student will study design with an emphasis on gaining an understanding of organizing principles that contribute to visual engaging and visual arrangements.</p>		

ART220	Material Studies Studio	3 credits
<p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p>		

Choose One:

2D Courses:

ART217	Drawing Studio	3 credits
<p>This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ART117 Drawing I 		

ART115	Painting I	3 credits
<p>This course introduces the student to basic principles of painting and two-dimensional thinking and expression. Drawing skills, color theory, stretcher construction, and a general understanding of visual art concepts accompany each assignment. Additional Fee(s): Applied art fee.</p>		

ART127	Printmaking I	3 credits
<p>This course is an introduction to the techniques and aesthetics of graphic media, including dry point, engraving, mezzotint, etching, and aquatint. Additional Fee(s): Applied art fee.</p>		

3D Courses

ART111	Ceramics I	3 credits
<p>This studio course provides students with an introduction to ceramic processes and materials. Instruction in beginning wheel-throwing methods augments competency in basic construction and surface application techniques. Projects focus on development of form and surface in ceramics, as well as exposure to historical and contemporary issues specific to the medium. Additional Fee(s): Applied art fee.</p>		

ART205	Sculpture Studio	3 credits
<p>This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.</p>		

Choose One:

2D Courses

ART317 Drawing Studio **3 credits**

This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART117 Drawing I

ART215 Painting Studio **3 credits**

This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART115 Painting I

ART227 Printmaking Studio **3 credits**

This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART127 Printmaking I

3D Courses

ART211 Ceramics Studio **3 credits**

This studio course advances the student in all technical aspects of ceramics and explores conceptual, critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART111 Ceramics I

ART305 Sculpture Studio **3 credits**

This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART205 Sculpture Studio

ART320 Material Studies Studio **3 credits**

Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.

Pre-requisites Complete the following course:

- ART220 Material Studies Studio

Choose One:

2D Courses

ART417 Drawing Studio **3 credits**

This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized.. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART117 Drawing I

ART315 Painting Studio **3 credits**

This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART115 Painting I

ART327 Printmaking Studio **3 credits**

This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART127 Printmaking I

3D Courses

ART311 Ceramics Studio **3 credits**

This studio course advances the student in all technical aspects of ceramics and explores conceptual and critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART211 Ceramics Studio

ART405 Sculpture Studio **3 credits**

This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.

Pre-requisites Complete the following course:

- ART305 Sculpture Studio

ART420 Material Studies Studio **3 credits**

Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.

Pre-requisites Complete the following course:

- ART320 Material Studies Studio

Art History Concentration

ART131 History of World Art I: Prehistory to 1400 **3 credits**

This introductory survey focuses on art of the ancient world and the Middle Ages in the West and selected non-Western cultures to 1400 including India, China, and Mesoamerica. It emphasizes the role of art in the formation of a culture, the shifting function of art in different societies and time periods, and the approaches students can use to understand art.

ART231 Renaissance Art **3 credits**

This course traces the rise of the humanistic spirit in the art of Italy between 1300 and 1550. Equal emphasis is placed on the achievements of Early Renaissance artists and architects (Ghiberti, Alberti, Donatello, Masaccio, Botticelli), and the masters of the High Renaissance (Leonardo, Raphael, Michelangelo, Bramante, Titian).

OR

ART234 Baroque and Rococo Art **3 credits**

An in-depth survey of the various styles and aims of European art from 1590 to 1700.

ART366 American Art: Colonial to 1900 **3 credits**

This course examines the major movements, artists, and cultural issues of American painting, sculpture, and photography from its beginnings to 1900. Special attention is given to works that address definitions of American "identity" and cultural interaction and conflict between races.

Pre-requisites Complete any 1 of the following courses:

- ART132 History of World Art II: 1400 to Present
- ART131 History of World Art I: Prehistory to 1400

OR

ART248 19th-Century Art **3 credits**

This survey examines art movements in France, England, Germany, and other European countries from the early to late 19th-century, focusing on Romanticism and Realism, the Pre-Raphaelites, Impressionism and Post-Impressionism, and Symbolism. It explores the impact of urbanization, industrialization, and race and gender issues on visual culture.

ART372 Curating African Art and Artifacts **3 credits**

This course explores the rich diversity of art across sub-Saharan Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the collection, including masks, wood sculpture, beadwork, and metalwork.

ART271 Asian Art **3 credits**

This course surveys the art of India, China, Southeast Asia, Korea, and Japan from the earliest civilizations to the modern period. Since much Asian artistic production was inspired by religious belief, students also will be introduced to the major currents of Asian religion and philosophy, including Buddhism, Hinduism, Jainism, Islam, Confucianism, Daoism, and Shintoism.

ART208 Introduction to Art Museum Studies **3 credits**

This course introduces students to the themes and issues addressed in the Art Museum Studies program, including an overview of the history and function of art museums, their role in society, the interpretation of objects for museum audiences, and other issues central to the museum profession such as censorship and repatriation.

OR

ART368 Museum Education and the Visual Arts **3 credits**

This course traces the development of the American art museum's educational mission from the early nineteenth century to the present. A range of programming types, including docent touring, computer-based learning, museum-school partnerships, and hands-on experiences are observed and analyzed. Students will also design programs for exhibitions in the Chatham University Art Gallery.

Pre-requisites Complete the following course:

- ART208 Introduction to Art Museum Studies
-

Art History Minor

5 courses

ART131 History of World Art I: Prehistory to 1400 **3 credits**

This introductory survey focuses on art of the ancient world and the Middle Ages in the West and selected non-Western cultures to 1400 including India, China, and Mesoamerica. It emphasizes the role of art in the formation of a culture, the shifting function of art in different societies and time periods, and the approaches students can use to understand art.

ART132 History of World Art II: 1400 to Present **3 credits**

This introductory survey focuses on Western art from the Renaissance to today and the art of selected non-Western cultures (including Japan, Africa, and Islamic countries) after 1400. It concentrates on the stylistic, technical, and expressive evolution of painting, architecture, and sculpture within specific historical contexts, yet also explores the cross-influences and interaction of non-Western and Western art as defining characteristics

of the modern world.

ART231 Renaissance Art 3 credits

This course traces the rise of the humanistic spirit in the art of Italy between 1300 and 1550. Equal emphasis is placed on the achievements of Early Renaissance artists and architects (Ghiberti, Alberti, Donatello, Masaccio, Botticelli), and the masters of the High Renaissance (Leonardo, Raphael, Michelangelo, Bramante, Titian).

ART254 Modern Art, 1900 to the Present 3 credits

In this course the student will be introduced to the major movements in European and American art since 1900. The first half will focus on 1900 to 1950 and the concept of modernism, who and what shaped it, and the shifting definitions of the artist. The second half will focus on recent trends in world art, focusing on new media and movements, including installation art, earth art, video art, postmodernism, and the new theoretical and conceptual approaches to art and art history.

ART366 American Art: Colonial to 1900 3 credits

This course examines the major movements, artists, and cultural issues of American painting, sculpture, and photography from its beginnings to 1900. Special attention is given to works that address definitions of American "identity" and cultural interaction and conflict between races.

Pre-requisites Complete any 1 of the following courses:

- ART132 History of World Art II: 1400 to Present
- ART131 History of World Art I: Prehistory to 1400

2022-2023 Course Catalog

Women's and Gender Studies (BA)

The major in women's and gender studies offers students the opportunity for the interdisciplinary study of women, transgender, and gender diverse individuals' contributions to society and their experiences in diverse cultures, polities, and historical periods. Students seek to understand the intersectional scholarship on women, transgender, and gender diverse individuals, and the new intellectual frameworks, methodologies, and feminist and queer theories that examine gender as a social construct and a hierarchical system of power. They analyze critically the representations and voices of women, transgender, and gender diverse individuals in literature, history, arts, and religious and philosophical traditions, in social and political theory and practice, and in the sciences, and they are encouraged to enunciate their own approaches to reshaping society.

Learning Outcomes

- Identify the historic and socio-cultural construction of gender, historic and contemporary women of importance as well as crucial moments in women's history and feminist activism.
- Define the complex intersectionality of social groups (e.g., race, class, gender, sexuality, worldview and faith communities, etc.).
- Analyze media, marketing, art, culture, politics through a gendered lens, as well as the diverse strategies through which feminists work and have worked to increase women's the agency of women, transgender, and gender diverse individuals at local, national, and global level, and in personal as well as communal contexts.
- Interpret feminist theory and analyze texts through a feminist lens.
- Perform multiple skills for working toward social change as well as personal growth and wellbeing.

Curriculum

Major Requirements

12 courses, including 6 credits Writing Intensive courses, Internship, and Integrative Capstone Seminar (36 credits)

WGS101	Introduction to Women's and Gender Studies	3 credits
	Examines the role and status of women in society using a variety of disciplinary perspectives. Students will examine materials that present and challenge cultural assumptions of the nature and roles of women and consider diversity among women.	

WGS201W	<p>Feminist Theory</p> <p>This course is designed to provide students with a critical introduction to the historical development and current controversies of feminist theory including global feminism and women's bodies as a site of contestation. It includes a comprehensive summary of the diverse and interdisciplinary philosophical strains that make up the intellectual heritage of modern feminism.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • WGS101 Introduction to Women's Studies • CST183 Representations of Race and Gender • WST101 Introduction to Women's Studies • WGS101 Introduction to Women's and Gender Studies 	3 credits
WGS322W	<p>Social Welfare: Women and Policy</p> <p>This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.</p>	3 credits
INTWGS303	<p>Internship - Women's and Gender Studies</p> <p>Internship - Women's and Gender Studies</p> <p>-----</p>	3 credits
One of the following:		
BUS310W	<p>Business Research and Analytics</p> <p>This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BUS110 Business Statistics • MTH110 Elementary Statistics • PSY213 Statistics and Research Design 	3 credits
ENG350W	<p>Seminar in Literary Theory and Scholarly Writing</p> <p>An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Multicultural Literature • ENG100 Introduction to Literary Studies 	3 credits

POL311W	<p>Selected Topics in Social Science Research</p> <p>The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.</p>	3 credits
PSY314W	<p>Foundations of Behavioral Research</p> <p>This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY213 Statistics and Research Design 	3 credits

WGS490	<p>Integrative Capstone</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG350W Seminar in Literary Theory and Scholarly Writing 	3 credits
6 approved WST/WGS Electives:		
ART213	<p>Special Topics</p> <p>Special Topics</p>	3 credits
ART230W	<p>Women and Art</p> <p>Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.</p>	3 credits

BIO218	Women's Health Issues This course examines the biology of women, both cis gender and people within trans communities, providing a framework for the discussion of health issues, current research, treatments, and historical perspectives. Aspects of reproductive life and an examination of psychological, sociological and cultural influence.	3 credits
CRM220	Women and the Criminal Justice System This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.	3 credits
CST183	Representations of Race and Gender This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.	3 credits
CST215	Perspectives in Queer Theory This course examines the cultural representations of lesbian, gay, bisexual, and transgender people in literature, film, history and social movements. We will explore how gender and sexual identities intersect with race, class and ethnicity. Finally, students will become conversant with the arguments and critical terms used in the field of queer theory. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG220	Gender and Sexuality in Speculative Fiction This course focuses on speculative fiction genres (which include but are not limited to science fiction, fantasy, and futurism). Course materials examine issues of gender and sexuality and how writers working in these genres envision alternative gendered realities through their constructions of language, the body, sensuality, identity, etc.	3 credits
ENG262	Introduction to Women Writers Examining writers from Mary Wollstonecraft to the present, this course delineates the features of a literary tradition specific to women writing in English. Students study novels, essays, and poetry.	3 credits
ENG385	Toni Morrison Seminar This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.	3 credits

Pre-requisites Complete the following course:

- ENG105 First-Year Writing

ENG452	Ecofeminist Literature This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ENG287 African-American Writers• ENG207 British Writers I	3 credits
FDT225	Female Narration: Race and Gender in Women's Films This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.	3 credits
HIS213	Special Topics Special Topics	3 credits
IND247	Intergroup Dialogue Seminar Students participate in conversations and readings across social identities, discuss and explore experiences across social identities and institutional contexts, and examine historical, psychological, and sociological materials leading to understanding of self and other. Social identity topics will rotate and focus on one identity (race, class, gender, sexual orientation, etc.).	3 credits
MUS150	History of Rock, Pop and Soul This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.	3 credits

PHI218	<p>Ethics and Women's Issues</p> <p>A discussion-based course that focuses upon issues of particular relevance to women. Topics discussed may include equality, affirmative action and comparative worth, social and gender roles, feminism, love, sexuality, family, work, caring and justice, pornography, fashion and beauty, abortion, reproduction, and ecofeminism.</p>	3 credits
PHI241	<p>Love, Sex, and Friendship</p> <p>This course is an intensive philosophical inquiry into the concepts of love, friendship, and sex and how these are connected. It examines ideas on relationship, intimacy, and personal fulfillment by some of the best thinkers in the western intellectual tradition. It also explores some puzzling contemporary problems surrounding relationships.</p>	3 credits
PHI300	<p>Womanist and Liberation Theology</p> <p>Womanist theology is a liberation theology that analyses politically oppressive structures, cultural habits, and race and gender constructs, and the ways these forces can shape experiences of faith. This course offers opportunities to engage and confront unjust and repressive theologies in ways that support greater inclusion and well-being.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
POL262	<p>Women and Politics</p> <p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	3 credits
PSY236	<p>Psychology of Women</p> <p>The course examines current theory and research on the psychology of women. topics include the development of gender roles, gender comparisons, women and work, love relationships, women's physical and mental health, violence against women, and women in later adulthood. Students who take this course should acquire an understanding of what it means to be a female in North America.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
SWK102	<p>Introduction to Social Work, Social Justice and Social Issues</p> <p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a</p>	3 credits

profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.

SWK321	Social Welfare and Social Justice This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.	3 credits
WGS202	Women's Leadership in the 21st Century This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership styles and agendas. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• CST183 Representations of Race and Gender• WGS101 Introduction to Women's and Gender Studies	3 credits
WGS365	Gendered Resistance, Riots, and Rebellions This course explores gendered resistance to social, political, and economic inequalities from the twentieth century through the present. The class examines leaders and issues in both organized movements, as well as events often labeled as riots or rebellions, and considers how we understand different attempts to challenge systems of power. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ENG105 First-Year Writing• WGS101 Introduction to Women's and Gender Studies	3 credits
WGS210	Narratives of Girlhood: Perils and Possibilities Girlhood is a condition of precarity and potential. Through close study of multiple narratives and analyses, this course asks: How do intersectional identity categories impact girls' ability to navigate adolescence? What health and safety challenges do girls face? How might social institutions evolve to care for and empower girls?	3 credits

Minor Requirements

6 courses: including

WGS101	Introduction to Women's and Gender Studies Examines the role and status of women in society using a variety of disciplinary perspectives. Students will examine materials that present and challenge cultural assumptions of the nature and roles of women and consider diversity among women.	3 credits
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WGS201W	Feminist Theory This course is designed to provide students with a critical introduction to the historical development and current controversies of feminist theory including global feminism and women's bodies as a site of contestation. It includes a comprehensive summary of the diverse and interdisciplinary philosophical strains that make up the intellectual heritage of modern feminism. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • WGS101 Introduction to Women's Studies • CST183 Representations of Race and Gender • WST101 Introduction to Women's Studies • WGS101 Introduction to Women's and Gender Studies 	3 credits
WGS322W	Social Welfare: Women and Policy This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.	3 credits
3 electives chosen from the list below:		
ART213	Special Topics Special Topics	3 credits
ART230W	Women and Art Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.	3 credits
BIO218	Women's Health Issues This course examines the biology of women, both cis gender and people within trans communities, providing a framework for the discussion of health issues, current research, treatments, and historical perspectives. Aspects of reproductive life and an examination of psychological, sociological and cultural influence.	3 credits
CRM220	Women and the Criminal Justice System This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.	3 credits

CST183	<p>Representations of Race and Gender</p> <p>This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.</p>	3 credits
CST215	<p>Perspectives in Queer Theory</p> <p>This course examines the cultural representations of lesbian, gay, bisexual, and transgender people in literature, film, history and social movements. We will explore how gender and sexual identities intersect with race, class and ethnicity. Finally, students will become conversant with the arguments and critical terms used in the field of queer theory.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG220	<p>Gender and Sexuality in Speculative Fiction</p> <p>This course focuses on speculative fiction genres (which include but are not limited to science fiction, fantasy, and futurism). Course materials examine issues of gender and sexuality and how writers working in these genres envision alternative gendered realities through their constructions of language, the body, sensuality, identity, etc.</p>	3 credits
ENG262	<p>Introduction to Women Writers</p> <p>Examining writers from Mary Wollstonecraft to the present, this course delineates the features of a literary tradition specific to women writing in English. Students study novels, essays, and poetry.</p>	3 credits
ENG385	<p>Toni Morrison Seminar</p> <p>This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG452	<p>Ecofeminist Literature</p> <p>This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG287 African-American Writers • ENG207 British Writers I 	3 credits

FDT225	Female Narration: Race and Gender in Women's Films This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.	3 credits
HIS213	Special Topics Special Topics	3 credits
IND247	Intergroup Dialogue Seminar Students participate in conversations and readings across social identities, discuss and explore experiences across social identities and institutional contexts, and examine historical, psychological, and sociological materials leading to understanding of self and other. Social identity topics will rotate and focus on one identity (race, class, gender, sexual orientation, etc.).	3 credits
MUS150	History of Rock, Pop and Soul This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.	3 credits
PHI218	Ethics and Women's Issues A discussion-based course that focuses upon issues of particular relevance to women. Topics discussed may include equality, affirmative action and comparative worth, social and gender roles, feminism, love, sexuality, family, work, caring and justice, pornography, fashion and beauty, abortion, reproduction, and ecofeminism.	3 credits
PHI241	Love, Sex, and Friendship This course is an intensive philosophical inquiry into the concepts of love, friendship, and sex and how these are connected. It examines ideas on relationship, intimacy, and personal fulfillment by some of the best thinkers in the western intellectual tradition. It also explores some puzzling contemporary problems surrounding relationships.	3 credits

PHI300	<p>Womanist and Liberation Theology</p> <p>Womanist theology is a liberation theology that analyses politically oppressive structures, cultural habits, and race and gender constructs, and the ways these forces can shape experiences of faith. This course offers opportunities to engage and confront unjust and repressive theologies in ways that support greater inclusion and well-being.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
POL262	<p>Women and Politics</p> <p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	3 credits
PSY236	<p>Psychology of Women</p> <p>The course examines current theory and research on the psychology of women. topics include the development of gender roles, gender comparisons, women and work, love relationships, women's physical and mental health, violence against women, and women in later adulthood. Students who take this course should acquire an understanding of what it means to be a female in North America.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	3 credits
SWK102	<p>Introduction to Social Work, Social Justice and Social Issues</p> <p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>	3 credits
SWK321	<p>Social Welfare and Social Justice</p> <p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	3 credits
WGS202	<p>Women's Leadership in the 21st Century</p> <p>This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership</p>	3 credits

styles and agendas.

Pre-requisites Complete any 1 of the following courses:

- CST183 Representations of Race and Gender
- WGS101 Introduction to Women's and Gender Studies

WGS365 Gendered Resistance, Riots, and Rebellions 3 credits

This course explores gendered resistance to social, political, and economic inequalities from the twentieth century through the present. The class examines leaders and issues in both organized movements, as well as events often labeled as riots or rebellions, and considers how we understand different attempts to challenge systems of power.

Pre-requisites Complete any 1 of the following courses:

- ENG105 First-Year Writing
- WGS101 Introduction to Women's and Gender Studies

WGS210 Narratives of Girlhood: Perils and Possibilities 3 credits

Girlhood is a condition of precarity and potential. Through close study of multiple narratives and analyses, this course asks: How do intersectional identity categories impact girls' ability to navigate adolescence? What health and safety challenges do girls face? How might social institutions evolve to care for and empower girls?

Women's Leadership Certificate

[Women's Leadership Certificate](#)

2022-2023 Course Catalog

Minor in African-American Studies

This interdisciplinary minor exposes students to the history, literature, and culture of African Americans throughout communities created by the dispersion of peoples from the African continent. Students apply contemporary theory in critical analysis by placing African American experiences, conditions, social institutions, and artistic contributions within the context of African Diaspora. 18 credits: 3 required courses and 3 electives from specific lists in history, literature, and art/music/film.

Curriculum

Minor Requirements

CST183	Representations of Race and Gender This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.	3 credits
HIS360	History of Pan-Africanism History of Panafricanism examines the birth and development of the ideology that promoted a universal approach to the rehabilitation of the philosophical traditions, need for self-respect, political consciousness, and aspirations for transatlantic unity among Black people between the 1770s to the end of the 20TH century.	3 credits
ENG287	African-American Writers This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnut, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ENG100 Introduction to Literary Studies• ENG105 First-Year Writing	3 credits

One (1) course in History:

HIS307	Oral History, Neighborhoods, and Race	3 credits
	Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.	
HIS220	U.S. Women's History	3 credits
	This course explores women's historical experiences in the United States, from Native American women in the pre-colonial era to the present. It investigates the interaction of gender, race, ethnicity, class and sexuality and the ways that these relationships have shaped women's lives socially, economically, and politically.	
HIS205W	Africa, Past and Present	3 credits
	This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.	
HIS328	Recent African History and NGO Networks	3 credits
	Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity being overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.	
HIS285	African-American History	3 credits
	This course examines the history of African Americans within a global context from the 1500s through present. The course explores the role of West Africa in the Atlantic economy and slave trade; the nature of slavery in the US as compared to Latin America; emancipation in the US and Latin America; industrialization and migration; and the civil rights movement in its international context.	
One (1) course in Literature		
ENG282	20th-Century African-American Literature	3 credits
	This course is a critical study of major African-American writers from the Harlem Renaissance of the 1920s to the present. Although the course concentrates on primary texts, specific attention is paid to contextualizing these works within historical and cultural frameworks. (See also Cultural Studies.)	

ENG286	Contemporary African-American Women Writers	3 credits
	This course will examine the literature of African-American women from 1950 to the present. Specifically, students focus on issues of marginalization, silencing, and female community and how they affect the construction of these narratives. Possible authors include Shange, Naylor, Williams, and Jones. (See also Cultural Studies.)	
ENG283	The Harlem Renaissance	3 credits
	The course explores the literature, politics, and arts of the Harlem Renaissance. This artistic, philosophical, and intellectual movement in New York City's Harlem took place roughly from the early 1920s to the onset of the Depression. Topics to be considered include Modernism, The Jazz Age, and Urban Migration. Specific focus will be placed on the relationship between identity and geography as we consider the effects of migration and urbanization.	
ENG385	Toni Morrison Seminar	3 credits
	This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • ENG105 First-Year Writing 	
ENG480	August Wilson Seminar	3 credits
	This course explores the dramatic work of August Wilson, paying particular attention to Wilson's ten-play cycle, which chronicles twentieth century African American life. Wilson's "Pittsburgh cycle" serves as a lens for reading the history of the city decade by decade.	
ENG427	Ethnicity and Place	3 credits
	This course focuses on the connection between place and cultural identity in the shaping of a writer's distinctive voice. Influences include ethnic, regional, and linguistic markers, as well as dislocation from the place of origination. Regional focus within the global community may vary by academic term.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • ENG105 First-Year Writing 	
ENG313	Special Topics	3 credits
	Special Topics	

One (1) course in Art, Music, and/or Film

ART372	Curating African Art and Artifacts	3 credits
	<p>This course explores the rich diversity of art across sub-Saharan Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the collection, including masks, wood sculpture, beadwork, and metalwork.</p>	
MUS174	Jazz Survey	3 credits
	<p>Students explore the origin and development of jazz from its African origins to Dixieland and contemporary styles. They become familiar with jazz musicians and a wide variety of jazz styles through recorded music and, when possible, live performances.</p>	
MUS150	History of Rock, Pop and Soul	3 credits
	<p>This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.</p>	
FDT225	Female Narration: Race and Gender in Women's Films	3 credits
	<p>This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.</p>	
FDT186 Introduction to Black Filmmaking		
ART313	Special Topics	3 credits
	Special Topics	
FDT313	Special Topics	3 credits
	Special Topics	

2022-2023 Course Catalog

Applied Machine Learning

The Applied Machine Learning Minor allows students to develop theoretical and mathematical understanding of data analytics and machine learning and translate theory into practice through hands-on applications.

Curriculum

Minor

CMP120	Introduction to Programming An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.	3 credits
DSA250	Fundamentals of Data Science In this course students learn the fundamentals of the data science process, including data acquisition, data cleaning and manipulation to prepare for analysis, common machine learning models for classification and regression, unsupervised machine learning models, and principles of model evaluation. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• CMP120 Introduction to Programming• MTH110 Elementary Statistics	3 credits
DSA411	Machine Learning and AI An introduction to machine learning and artificial intelligence. Topics include classification, regression, clustering, planning, and scheduling. Includes current issues relevant to big data problems. Pre-requisites Complete the following course: <ul style="list-style-type: none">• DSA250 Fundamentals of Data Science	3 credits
MTH110	Elementary Statistics Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.	3 credits

MTH151	Calculus I	4 credits
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This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.

MTH244	Discrete Mathematics	3 credits
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This course is an introduction to the fundamental logic and mathematical concepts of discrete quantities, as employed in digital computers. Emphasis will be on the careful and precise expression of ideas. Topics include sets and logic, relations and functions, proof techniques, algorithms, combinatorics, discrete probability, graphs, and trees. Three hours of class per week.

2022-2023 Course Catalog

Art Museum Studies

The Art Museum Studies minor provides students with the skills, experience, and specific professional knowledge necessary to work in the art museum field. The minor emphasizes practical experience designing and installing exhibitions and planning of programming, and addresses the history and theory of the art museum. It is an appropriate accompaniment to majors in Art History, Arts Management, and Visual Arts, and to double majors in Art History and other disciplines. Integral to coursework are field trips to local museums, museum professionals as adjunct faculty and guest speakers, and the use of the Chatham University Art Gallery and Chatham's art collections.

Curriculum

Minor Requirements

5 courses:

ART208	Introduction to Art Museum Studies This course introduces students to the themes and issues addressed in the Art Museum Studies program, including an overview of the history and function of art museums, their role in society, the interpretation of objects for museum audiences, and other issues central to the museum profession such as censorship and repatriation.	3 credits
ART368	Museum Education and the Visual Arts This course traces the development of the American art museum's educational mission from the early nineteenth century to the present. A range of programming types, including docent touring, computer-based learning, museum-school partnerships, and hands-on experiences are observed and analyzed. Students will also design programs for exhibitions in the Chatham University Art Gallery. Pre-requisites Complete the following course: <ul style="list-style-type: none">• ART208 Introduction to Art Museum Studies	3 credits
ART372	Curating African Art and Artifacts This course explores the rich diversity of art across sub-Saharan Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the collection, including masks, wood sculpture, beadwork, and metalwork.	3 credits

ART378	Curating the Visual Arts	3 credits
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This course explores the roles and duties of the art museum curator. Topics addressed include collection care and management, exhibition planning and design, object handling, and exhibition critiques. Curators from local museums will serve as guest speakers. Students will collaboratively curate at least one exhibition.

Pre-requisites Complete the following course:

- ART208 Introduction to Art Museum Studies

INTART303	Internship - Art	3 credits
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Internship - Art

2022-2023 Course Catalog

Dance

A minor in Dance offers students the opportunity to develop skills that will complement many other fields of study.

Curriculum

Minor

18 credits

DAN101	The World of Dance	3 credits
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This class explores the multitude of dance forms around the world via lectures, readings, films, and live performances. It approaches movement as a means of expressing the spirit and performing ritual, interacting socially and embodying cultural mores, and creating art. It looks at how new forms of dance are evolving as cultures fuse and technology opens up new venues.

DAN121	Contemporary Dance Technique I	3 credits
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Students study basic dance movements through an exploration, analysis and identification of Contemporary Dance techniques built on foundational elements such as clear articulation of the spine, isolations, grounded movement, vocabulary and musicality. By using movement and knowledge of the body, students will learn to express themselves affectively and artistically.

DAN305 Choreography (3)

DAN213	Special Topics:	3 credits
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Special Topics course.

OR

DAN313	Special Topics	3 credits
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This course in dance covers the techniques and historical significance associated with a specific style.

DAN239	Dance Performance	3 credits
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This course is designed to refine the dancer's strength and style, enhance performance artistry, and acquire technical excellence through practical exercises and rehearsals in class. Students will learn correct body alignment and the principles of dance technique. Emphasis will be placed on movement phrasing, choreography, and performance.

DAN239 Dance Performance (3)

Restricted elective credits from the list below:

DAN125	Folk and Ethnic Dance	3 credits
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Folk and Ethnic dance will focus on the similarities and differences among the different International classical and folkdance systems. Through workshops students will learn basic dance steps as adaptation of motor skills, rhythmic perception and accuracy, musical phrasing and spatial awareness in both classical and folk ethnic forms.

DAN160	African Dance	3 credits
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This introductory course immerses students in the many varieties and styles of African dance, while also attending to the ceremonial and ritual functions of dance in African culture. Various African historical and aesthetic perspectives will be introduced and studies through movement. Videotapes illustrating dance forms, and guest artists will also enhance this course.

DAN160 - African Dance

DAN493	Independent Study	3 credits
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Independent Study

Pre-requisites Complete the following course:

- XXX123 Permission of Instructor

DAN493 - Independent Study (3)

2022-2023 Course Catalog

Holocaust, Genocide, and Human Rights Studies

This minor offers students the opportunity to engage in interdisciplinary learning about past and present acts of genocide, with an emphasis on human behavior and human rights, considering ways that the Holocaust continues to shape responses to human rights violations locally and globally.

Curriculum

Minor Requirements

SSC121	Introduction to Genocide Studies Through scholarship, survivor testimony, and film, this course introduces the study of genocide, examines specific cases, and considers strategies to intervene before persecution escalates to genocide.	3 credits
HIS224	The Holocaust This course surveys the destruction of two-thirds of European Jewry during World War II. Through a close reading of primary texts and secondary sources, it explores the foundations and development of Nazi policy toward the Jews. The course documents the reactions of Jews, European peoples and governments, the U.S. people and government, and various churches and political movements.	3 credits
HIS202W	Modern Europe The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."	3 credits
HIS270	U.S. and the Holocaust This course examines the US and the Holocaust in Europe during the 1930s and 1940s. The primary focus is on developments in the US such as antisemitism, response to the rise of Hitler, knowledge of the Holocaust, and important decisions by national leaders.	3 credits

Choice of One:

POL302 Ethnic Conflict 3 credits

This course is designed to introduce students to theories about the sources of nationalist and ethnic conflict and strategies that have been used to manage these conflicts. In the first part of class we will examine sources of ethnic identity and how governments have attempted to reinforce or deemphasize those identities. Second, we will examine how domestic factors have and have not worked to suppress ethnic conflict. Finally, we will examine how the international community or other third parties have attempted to bring about the peaceful resolution of conflicts.

Pre-requisites Complete any 1 of the following courses:

- POL100 Introduction to Comparative Politics
- POL104 Introduction to International Relations

CRM362 What is Evil? 3 credits

This course will utilize an interdisciplinary framework (criminology, sociology, psychology, history, political science) to examine definitions of "evil," motivations to commit "evil" actions, social reactions to "evil," and control of "evil."

Pre-requisites Complete any 1 of the following courses:

- CRM101 Introduction to Criminal Justice
- PSY101 General Psychology

Choice of One:

ENG446 Wilderness and Literature 3 credits

Through close reading of poetry and prose, students will explore the relationship between wilderness and literature - both representations of the natural world and what Stanley Kunitz calls "your wilderness . . . the untamed self that you pretend doesn't exist, all that chaos locked behind the closet door, those memories yammering in the dark." Writers examined include: Anne Carson, Mark Doty, Kathleen Hill, and Virginia Woolf.

EDU4XX Teaching the Holocaust

2022-2023 Course Catalog

Jewish Studies

This minor is an interdisciplinary study of Jewish history, literature, religion, culture, and art.

Curriculum

Minor Requirements

CST120	Introduction to Jewish Studies	3 credits
<p>Far from monolithic, the global Jewish experience has been one of multiculturalism, ethnic and linguistic diversity, adaptation, exile, and migration. This interdisciplinary course will consider the global Jewish experience from ancient times to the present day through a variety of lenses: Religion, diaspora, culture, language and literature, and self-representation.</p>		
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HIS252 History of Judaism		
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HIS224	The Holocaust	3 credits
<p>This course surveys the destruction of two-thirds of European Jewry during World War II. Through a close reading of primary texts and secondary sources, it explores the foundations and development of Nazi policy toward the Jews. The course documents the reactions of Jews, European peoples and governments, the U.S. people and government, and various churches and political movements.</p>		
<hr/>		
ENG449	Exiles	3 credits
<p>This course will examine the 20th-century condition of exile in relation to its different configurations, from European émigrés to postcolonial subjects to experiences of exile in the United States, to the relation of exile to Diaspora (African, Indian, and Jewish). Students will see how different patterns of movement define subjects variously as exiles, migrants, nomads, and tourists. They also will approach the concept of exile from psychological, geographical, and cultural angles to understand the different uses of the term, its scope, and its limitations.</p>		
<hr/>		
HIS326	The Arab-israeli Conflict	3 credits
<p>This course examines the origins and issues of conflict between Arabs and Israelis over Palestine. Using primary and secondary sources, arguments of the conflict over several decades are considered, emphasizing the conflict between Palestinians and Israelis but also examining the role of regional and world powers.</p>		

SSC219 American Jewish Experience

3 credits

This course surveys the experience of the Jewish community in America occasionally using Pittsburgh as a case study from the 19th century up through contemporary times. Events are placed in the context of political and social currents in America, Europe, and the Middle East.

2022-2023 Course Catalog

Philosophy

This program explores the meaning and value of human existence, methods of rational inquiry, history of ideas; varieties of religious experience; and the moral and intellectual issues of a technological, global society. This liberal arts discipline encourages critical reflection, self-understanding, and the pursuit of wisdom.

Curriculum

Minor

PHI113	Introduction to Philosophy An introductory course focusing on some of the perennial problems of philosophy: the relation of mind and body; the nature of knowledge, freedom and determinism; the existence of God; immortality, and moral responsibility.	3 credits
PHI121	Introduction to Logic An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.	3 credits
Choose 4 electives:		
PHI210	Biomedical Ethics This course is concerned with the ethical issues arising from recent biomedical innovations or issues that might arise from future innovations. Among the topics discussed are new definitions of death and personhood, killing versus letting die, allocation of scarce medical resources, organ transplants, genetic engineering, the psychiatric control of human behavior, and new projected techniques of human sexual and asexual reproduction.	3 credits
PHI213	Special Topics	3 credits
PHI218	Ethics and Women's Issues A discussion-based course that focuses upon issues of particular relevance to women. Topics discussed may include equality, affirmative action and comparative worth, social and gender roles, feminism, love, sexuality, family, work, caring and justice, pornography, fashion and beauty, abortion, reproduction, and ecofeminism.	3 credits

PHI225	Environmental Ethics	3 credits
<p>An investigation of some of the important moral issues generated by human interaction with the environment (natural entities, ecosystems, and other species), such as obligation to future generations, the theoretical foundations for an adequate environmental ethic, biodiversity preservation, environmentally sound development and cultural practices, responsibility to animals, and personal choices and lifestyles. Cross-listed as ENV 225.</p>		
PHI241	Love, Sex, and Friendship	3 credits
<p>This course is an intensive philosophical inquiry into the concepts of love, friendship, and sex and how these are connected. It examines ideas on relationship, intimacy, and personal fulfillment by some of the best thinkers in the western intellectual tradition. It also explores some puzzling contemporary problems surrounding relationships.</p>		
PHI300	Womanist and Liberation Theology	3 credits
<p>Womanist theology is a liberation theology that analyses politically oppressive structures, cultural habits, and race and gender constructs, and the ways these forces can shape experiences of faith. This course offers opportunities to engage and confront unjust and repressive theologies in ways that support greater inclusion and well-being.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 		
PHI301	Biomedical and Research Ethics	3 credits
<p>This course is an intensive examination of ethical issues within the professional domains of biomedicine and human subjects research. Topics covered may include patient autonomy, confidentiality, informed consent, life and death, human subjects research, and profession-specific ethical standards.</p>		

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Social Justice

The minor promotes an interdisciplinary understanding of social justice that is historically rooted, advocacy-based, and provides students the tools to make a positive impact on their communities. Core and elective courses explore the historical and theoretical context of social justice, develop culturally sensitive communication skills, and examine contemporary issues.

Learning Outcomes

Students who complete this minor will be able to:

1. Demonstrate understanding of power dynamics within institutions and across social identities.
2. Articulate a historical understanding of social justice issues and how they manifest in current events and apply to their major areas of study. (Electives)
3. Articulate an understanding of the affordances and limitations of various approaches to social change. (Electives)
4. Demonstrate cultural awareness and sensitivity in their communication skills. (Core)
5. Apply their knowledge to strategic participation in social justice actions (internal and external). (Core)

Curriculum

Minor

Core Courses:

SWK102	Introduction to Social Work, Social Justice and Social Issues	3 credits
	This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.	

OR

WGS101	Introduction to Women's and Gender Studies	3 credits
	Examines the role and status of women in society using a variety of disciplinary perspectives. Students will examine materials that present and challenge cultural assumptions of the nature and roles of women and consider diversity among women.	

OR

POL101	American Government and Public Policy	3 credits
	This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.	

IND130	Social Activism Institute	1 credits
	Through this course, students will learn about service, civic work, and advocacy in specific fields from faculty and a professional in that field. Professionals will provide students with information about their background, professional competencies needed to pursue a career in their field, and the challenges and rewards of their work.	

IND207	Systems of Social Identity, Power, and Justice	3 credits
	This course examines the concept of power and how it is applied in both public and private spaces. We examine philosophical definitions of power, how power is wielded in various institutional settings and how power imbalances are demonstrated in several contemporary issue debates.	

COM209	Intercultural Communication: Values and Ethics	3 credits
	Course will provide the student with an appreciation of the complexities involved in the development of beliefs, attitudes and behaviors that reflect cultural values. This course will provide an understanding of the specific forces, which shape perceptions, feelings and behaviors of various cultural groups. These forces include socially constructed categories such as race, ethnicity, nationality, gender, socio-economic status, and religion. These will be explored in a variety of contexts, language, family structures and the handling of conflict of laws and ethics (cultural relativism) will be examined.	

Elective Courses:

Choose 1 courses from each of the tracks below:

Theory and Identity - Outcomes 2 and 3

CST183	<p>Representations of Race and Gender</p> <p>This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.</p>	3 credits
WGS202	<p>Women's Leadership in the 21st Century</p> <p>This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership styles and agendas.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CST183 Representations of Race and Gender • WGS101 Introduction to Women's and Gender Studies 	3 credits
WGS365	<p>Gendered Resistance, Riots, and Rebellions</p> <p>This course explores gendered resistance to social, political, and economic inequalities from the twentieth century through the present. The class examines leaders and issues in both organized movements, as well as events often labeled as riots or rebellions, and considers how we understand different attempts to challenge systems of power.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing • WGS101 Introduction to Women's and Gender Studies 	3 credits
CST215	<p>Perspectives in Queer Theory</p> <p>This course examines the cultural representations of lesbian, gay, bisexual, and transgender people in literature, film, history and social movements. We will explore how gender and sexual identities intersect with race, class and ethnicity. Finally, students will become conversant with the arguments and critical terms used in the field of queer theory.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
HIS285	<p>African-American History</p> <p>This course examines the history of African Americans within a global context from the 1500s through present. The course explores the role of West Africa in the Atlantic economy and slave trade; the nature of slavery in the US as compared to Latin America; emancipation in the US and Latin America; industrialization and migration; and the civil rights movement in its international context.</p>	3 credits

CRM332	<p>History of Crime and Punishment</p> <p>This course will provide an introduction to the historical study of crime and punishment. Specifically, the course will examine definitions of crime, goals of punishment, and how these forms of crime and punishment reflect the structure of that society within that specific historical context.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	3 credits
HIS351	<p>Asian Pacific Islander America: History and Culture</p> <p>Asian Pacific Islander American is a category well worth unpacking in cultural history contexts from the Western Pennsylvanian to the American and global, in order to grasp these communities' diversity and commonality, as well as struggles, resilience, and creative impact in social formations and in the arts.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
SUS102	<p>Sustainability and Society</p> <p>Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.</p>	3 credits
FDT225	<p>Female Narration: Race and Gender in Women's Films</p> <p>This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.</p>	3 credits
EDU104	<p>Perspectives on Education</p> <p>Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee</p>	3 credits

<p>POL262</p>	<p>Women and Politics</p> <p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	<p>3 credits</p>
<p>POL268</p>	<p>Environmental Policy</p> <p>This course takes an interdisciplinary approach to the study of the theory and practice of environmental policies. The course focuses on the political and economic factors contributing to the success and failure of present environmental policies. Topics include the roles of government and the market in causing environmental problems, analysis of proposed means for resolving those problems, and the application of economic and political analyses to selected environmental issues.</p>	<p>3 credits</p>
<p>POL303</p>	<p>Constitutional Law I: US Govt Powers/Relationships</p> <p>This course examines the political science of law and courts through a consideration of the scope of Article III jurisdiction, bargaining and decision-making on the U.S. Supreme Court, and political struggles over doctrine within the judicial hierarchy. Topics include the ways in which courts have affected Congressional power over taxation and commerce and presidential domestic and international powers.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	<p>3 credits</p>
<p>CRM310</p>	<p>Survey of Corrections</p> <p>This course provides both a historical and contemporary exploration of correction methods utilized in the United States. This course examines the philosophy, theory, and practices involved in the control and behavior modification of offenders. Issues of inequality and at-risk populations are explored.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 Introduction to Criminal Justice 	<p>3 credits</p>
<p>FST315</p>	<p>Food Access and Policy</p> <p>If food is a basic human right, how do societies create universal access to food? This course explores the ethical basis for making citizens food secure despite global inequality. Major topics include private vs. public solutions and the relationship between food access, gender, cultural appropriateness, nutrition, sustainability, and justice.</p>	<p>3 credits</p>

SWK322W	Social Welfare: Women and Policy	3 credits
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This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.

OR

WGS322W	Social Welfare: Women and Policy	3 credits
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This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.

EDU430	Diverse Family and Community Partnerships	3 credits
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Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.

Practical Application - Outcome 5

IND246	Intergroup Dialogue Facilitator Training	3 credits
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These courses give students a foundation to facilitate intergroup dialogue classes and workshops. The topics of this course include group facilitation skills; individual and group social identity development; impact of prejudice and stereotyping; difference and dominance and the nature of social oppression; culture, culture cues, and judgements.

INTXXX303 Internship

POL202L	Public Policy Analysis Field Experience	2 credits
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A community partnership provides a real-world context for students to assess an issue of public policy. Students develop and research policy alternatives, create an appropriate system for analyzing and evaluating alternatives, make a recommendation for action, and present their findings to a decision-making body.

Pre-requisites Complete the following course:

- POL202W Understanding Public Policy

SWK355	<p>Working with Organizations and Communities</p> <p>The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 Introduction to Social Work, Social Justice and Social Issues 	3 credits
HIS307	<p>Oral History, Neighborhoods, and Race</p> <p>Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.</p>	3 credits
PSY211	<p>PAAR Training in Sexual Assault Counseling</p> <p>This course will provide students with 40 hours of volunteer training developed and implemented by the Pittsburgh Action Against Rape (PAAR). Successful completion of the training will qualify them as a Sexual Assault Counselor.</p>	3 credits
SUS306W	<p>Equitable Community Development</p> <p>This class introduces community development theory, history, and practice through an equity lens. We explore the roots of racial inequities and the role of urban planning in perpetuating inequities. Students assess case studies and learn how to support equitable development, including through housing, social capital, the arts, and local economies.</p>	3 credits

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Theater

Curriculum

Minor

THT141	Acting One	3 credits
<p>Through warmups, games, exercises, and text, students develop their physical, vocal, and emotional creativity. Students build on vocal and physical fundamentals through performance of contemporary texts. They are introduced to modern drama, develop skills for character analysis, acquire basic vocabulary, and evaluate professional performances. Additional Fee(s): Additional Art Fee</p>		
THT147	Stage Craft	3 credits
<p>This survey course is an introduction to the elements of technical theatre, including scenery, properties, costumes, lighting, sound, and stage management. Through this course, students will be exposed to hands-on training in a variety of areas. Student projects for this course may be used in various productions. Additional Fee(s): Additional Art Fee (\$20)</p>		
THT231	Acting Two	3 credits
<p>This course examines texts and modalities outside of traditional modern drama. Students focus on physicalized practices, exploratory vocal technique, and textual investigation and development. They analyze professional productions within the given framework. The class culminates in a theatre piece created and performed by the students in collaboration with Directing students.</p>		
THT241	History of Drama	3 credits
<p>Students study the trajectory of drama throughout time and across the world. They explore the historical contexts of seminal texts, playwrights, theatre practitioners, and theatrical movements. Students will also put texts into action as actors, directors, and dramaturgs, conceptualize productions, and analyze professional work. Additional Fee</p>		
<p>Six additional credits from the list below * THT213 will be offered as needed; THT458 will be offered in spring semesters starting in 2022; others will be offered each semester.</p>		
THT245	Scene Work for the Stage	3 credits
<p>Students develop techniques for the proper preparation of a role through disciplined rehearsal and comprehensive character and script analysis. These techniques are applied to scene work and monologue preparation, encompassing both classical and contemporary dramatic literature. Prerequisite(s): THT 141 and permission of the instructor.</p>		

THT149	Play Performance This course is an introduction to conceptualization and creation of theatrical productions. Theory and analysis of structure, elements, and styles of drama from the written script are coupled with practical techniques to realize a unified vision on stage. Concepts integral to directing, dramaturgy, design, character development, and playwriting are explored.	3 credits
THT458	Directing THT458: Directing Students will develop skills in script analysis, dramaturgical research, the creation of stage imagery, and the practical considerations of casting, rehearsing and communicating within the process of creating a show. The course culminates in students directing a publicly performed one-act play. Additional Applied Fee (s): Applied Art Fee	4 credits
THT260	Theatre Production Lab This course is a practicum for producing Chatham's undergraduate drama productions. Production processes addressed: Preproduction, auditions, the rehearsal process, show production, and post production. In this course students gain experience and knowledge of the creative, technical, and professional aspects of working on a theatrical show.	3 credits
THT491	Independent Study Independent Study Pre-requisites Complete the following course: <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	1 credits

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Environmental Social Work Certificate

The certificate in Environmental Social Work is a multi-disciplinary certificate designed to equip students with social work principles within the context of environmental justice, food access, and sustainability. The certificate is intended for students who are interested in exploring environmental justice in social work.

Curriculum

Required

6 courses (18 credits): Five courses are required plus an additional elective

SWK102	Introduction to Social Work, Social Justice and Social Issues This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.	3 credits
SUS102	Sustainability and Society Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.	3 credits
FST315	Food Access and Policy If food is a basic human right, how do societies create universal access to food? This course explores the ethical basis for making citizens food secure despite global inequality. Major topics include private vs. public solutions and the relationship between food access, gender, cultural appropriateness, nutrition, sustainability, and justice.	3 credits
SWK355	Working with Organizations and Communities The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice. Pre-requisites Complete the following course: <ul style="list-style-type: none">• SWK102 Introduction to Social Work, Social Justice and Social Issues	3 credits

SUS203W	Global Environmental Health	3 credits
<p>This course addresses the connection between health and environment. Topics include: environmental epidemiology, toxicology, policy, radiation and energy disease, and water, air, soil qualities. The work of scientists and public health specialists to discover, assess, and reduce risk to environment health problems are explored. Case studies provide context and background for environmental health issues past and present.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • SUS100 Sustainable Systems • SUS100 Sustainability Science • SUS201 Integrative Biology • BIO144 The Organism 		

Electives

One from a list of 15 courses

EDU340	Education for Sustainability	3 credits
<p>Students will learn how to promote collective problem-solving skills in K12 classrooms to address critical environmental, economic, and social issues. Connections between sustainability, poverty, and equity issues will be highlighted. This course will include a multi-week field experience in Costa Rica plus on the ground meetings before and after.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EDU104 Perspectives on Education 		
FST215W	Global Foodways	3 credits
<p>Course is focused on the global history and nature of food traditions, cuisines, and cultures, from the Columbian Exchange to globalization, with a depth analysis of one region, country, or time frame. Emphasis on the division of labor, colonialism, conquest, power, and continuity and change in social and economic systems.</p>		
FST302	Nutrition and Community	3 credits
<p>This course focuses on North American community-based nutrition research, programs and policies. Students become familiar with community-based research, programs, and policies where nutrition plays a role. Using public health nutrition and community asset building, it includes an introduction to grant writing, evaluation, and assessment to support community health programs.</p>		
FST307W	Community and Food	3 credits
<p>Through experiential learning and field work, this course explores the intersections between food and community. Global and regional food systems are "felt" at the level of community and communities often create the organization of agriculture and food. Students will practice applied work with community, government, nonprofit, activist, and business groups.</p>		

SUS210	<p>Sustainability and Technology</p> <p>This course discusses opportunities and challenges for using technology for sustainability. We will discuss innovation for sustainability and societal adoption, and will explore ways to use renewable energy and other technologies for homes and workplaces, the internet of Things, closed loops and new materials, sustainable transportation, and smart water systems.</p>	3 credits
SUS335	<p>Renewable Energy and Society</p> <p>This course explores the relationship of energy production and consumption with sustainability. Non-renewable and renewable energy resources and their environmental and social impacts will be discussed. We will explore the Eden Hall energy systems and investigate in more detail how solar energy could be used on a larger scale.</p>	3 credits
SUS380	<p>Economics in a Changing World</p> <p>An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • SUS102 Foundations of Sustainability • SUS102 Sustainability and Society 	3 credits
SUS401	<p>Sustainability Policy and Decision Making</p> <p>This course examines contrasting rationales supporting environmental values and human interests that compete against those values; the enactment and mechanics of regulations and statutes; environmental economics and politics. The socio-economic, legal and political implications will be scrutinized through case studies of local and/or global environmental and ecological concern.</p>	3 credits
SUS416	<p>Sustainable Decision Analysis</p> <p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>	3 credits
SUS435	<p>Green and Social Innovation</p> <p>Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.</p>	3 credits

SUS470	Corporate Social Responsibility (CSR) This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.	3 credits
SWK201W	Human Behavior in the Social Environment I This course examines the development of individuals, couples, and families from birth to death within the framework of relevant biological, psychological, sociological, and social work research and theory. Pre-requisites Complete the following course: • PSY101 General Psychology	3 credits
SWK321	Social Welfare and Social Justice This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.	3 credits
SWK322W	Social Welfare: Women and Policy This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.	3 credits
WGS322W	Social Welfare: Women and Policy This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.	3 credits

Internship or field placement that meets social work and sustainability goals

2022-2023 Course Catalog

Forensic Social Work Certificate

This certificate will equip students with social work skills, knowledge and principles within the context of the American criminal justice, mental health and child welfare systems. The goal is to foster world-ready graduates committed to social justice equality to become change makers with their organizations, communities, and in society.

Learning Outcomes

1. Demonstrate ethical and professional behavior; professionalism in practice.
2. Engage in practice informed research and research-informed practice.
3. Advance human rights and social, economic, and environmental justice.
4. Demonstrate knowledge of the purpose and functioning of the contemporary American criminal justice system, and distinctions between adult and juvenile justice systems.
5. Demonstrate knowledge of history, theory, practice and legal environment of law enforcement and police organizations.
6. Demonstrate knowledge of criminal law, criminal procedures, prosecution, defense, court procedures, and decision-making.

Curriculum

Major Requirements

CRM101	Introduction to Criminal Justice	3 credits
	This course is an introduction to U.S. criminal justice system. Topics covered include the nature of crime, law, justice, police, functions of courts, and the effectiveness of punishment and sanctions. Also explored will be the roles of various professionals in the system to introduce students to potential career paths.	
OR		
SWK102	Introduction to Social Work, Social Justice and Social Issues	3 credits
	This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a	

profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.

SWK224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as CRM 224.	3 credits
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OR

CRM224	Juvenile Justice Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as SWK 224.	3 credits
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INTCRM303	Internship - Criminology Internship - Criminology	3 credits
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SWK490	Integrative Capstone The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• PSY213 Statistics and Research Design• PSY314W Foundations of Behavioral Research	3 credits
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OR

CRM490

Integrative Capstone

3 credits

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-requisites Complete all 2 of the following courses:

- PSY213 Statistics and Research Design
- PSY314W Foundations of Behavioral Research

Electives

2 CRM / PSY / SWK
Electives

2022-2023 Course Catalog

Women's Leadership Certificate

The certificate in Women's Leadership offered by the Women's Institute at Chatham University is a multi-disciplinary program designed to equip students with the theory, skills, and practice of leadership. Students earning a certificate will be prepared to take on leadership roles in their chosen fields and beyond, from business, politics, science, and the arts to healthcare, education, non-profits, NGO's, and more. The goal of the program is to foster world-ready graduates committed to gender equity, who possess the professional skills and experience to become change makers in their organizations, in their communities, and in society at large.

The certificate may be added to any undergraduate major. In addition to 18 credits of coursework, students are required to participate in two signature programs offered by the Women's Institute or its two outreach centers, the Center for Women's Entrepreneurship and the Pennsylvania Center for Women and Politics. Undergraduate certificates must be earned within a degree program.

Curriculum

Course Requirements

One Foundation Course:

WGS101	Introduction to Women's and Gender Studies	3 credits
	Examines the role and status of women in society using a variety of disciplinary perspectives. Students will examine materials that present and challenge cultural assumptions of the nature and roles of women and consider diversity among women.	

OR

CST183	Representations of Race and Gender	3 credits
	This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.	

WGS202	Women's Leadership in the 21st Century	3 credits
	<p>This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership styles and agendas.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CST183 Representations of Race and Gender • WGS101 Introduction to Women's and Gender Studies 	

INTWGS303	Internship - Women's and Gender Studies	3 credits
	Internship - Women's and Gender Studies	

(or approved Internship course)*

WGS490	Integrative Capstone	3 credits
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG350W Seminar in Literary Theory and Scholarly Writing 	

(or approved Capstone course)*

* Student may use **Internship** and/or **Capstone** from their major if learning outcomes also fulfill those for Certificate.

Two Women's and Gender Studies Electives:

ART213	Special Topics	3 credits
	Special Topics	

ART230W	<p>Women and Art</p> <p>Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.</p>	3 credits
BIO218	<p>Women's Health Issues</p> <p>This course examines the biology of women, both cis gender and people within trans communities, providing a framework for the discussion of health issues, current research, treatments, and historical perspectives. Aspects of reproductive life and an examination of psychological, sociological and cultural influence.</p>	3 credits
CRM220	<p>Women and the Criminal Justice System</p> <p>This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.</p>	3 credits
CST183	<p>Representations of Race and Gender</p> <p>This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.</p>	3 credits
CST215	<p>Perspectives in Queer Theory</p> <p>This course examines the cultural representations of lesbian, gay, bisexual, and transgender people in literature, film, history and social movements. We will explore how gender and sexual identities intersect with race, class and ethnicity. Finally, students will become conversant with the arguments and critical terms used in the field of queer theory.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG220	<p>Gender and Sexuality in Speculative Fiction</p> <p>This course focuses on speculative fiction genres (which include but are not limited to science fiction, fantasy, and futurism). Course materials examine issues of gender and sexuality and how writers working in these genres envision alternative gendered realities through their constructions of language, the body, sensuality, identity, etc.</p>	3 credits

ENG262	<p>Introduction to Women Writers</p> <p>Examining writers from Mary Wollstonecraft to the present, this course delineates the features of a literary tradition specific to women writing in English. Students study novels, essays, and poetry.</p>	3 credits
ENG385	<p>Toni Morrison Seminar</p> <p>This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
ENG452	<p>Ecofeminist Literature</p> <p>This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG287 African-American Writers • ENG207 British Writers I 	3 credits
FDT225	<p>Female Narration: Race and Gender in Women's Films</p> <p>This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.</p>	3 credits
HIS213	<p>Special Topics</p> <p>Special Topics</p>	3 credits

IND247	<p>Intergroup Dialogue Seminar</p> <p>Students participate in conversations and readings across social identities, discuss and explore experiences across social identities and institutional contexts, and examine historical, psychological, and sociological materials leading to understanding of self and other. Social identity topics will rotate and focus on one identity (race, class, gender, sexual orientation, etc.).</p>	3 credits
MUS150	<p>History of Rock, Pop and Soul</p> <p>This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.</p>	3 credits
PHI218	<p>Ethics and Women's Issues</p> <p>A discussion-based course that focuses upon issues of particular relevance to women. Topics discussed may include equality, affirmative action and comparative worth, social and gender roles, feminism, love, sexuality, family, work, caring and justice, pornography, fashion and beauty, abortion, reproduction, and ecofeminism.</p>	3 credits
PHI241	<p>Love, Sex, and Friendship</p> <p>This course is an intensive philosophical inquiry into the concepts of love, friendship, and sex and how these are connected. It examines ideas on relationship, intimacy, and personal fulfillment by some of the best thinkers in the western intellectual tradition. It also explores some puzzling contemporary problems surrounding relationships.</p>	3 credits
PHI300	<p>Womanist and Liberation Theology</p> <p>Womanist theology is a liberation theology that analyses politically oppressive structures, cultural habits, and race and gender constructs, and the ways these forces can shape experiences of faith. This course offers opportunities to engage and confront unjust and repressive theologies in ways that support greater inclusion and well-being.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing 	3 credits
POL262	<p>Women and Politics</p> <p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • POL101 American Government and Public Policy 	3 credits

<p>PSY236</p>	<p>Psychology of Women</p> <p>The course examines current theory and research on the psychology of women. topics include the development of gender roles, gender comparisons, women and work, love relationships, women's physical and mental health, violence against women, and women in later adulthood. Students who take this course should acquire an understanding of what it means to be a female in North America.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 General Psychology 	<p>3 credits</p>
<p>SWK102</p>	<p>Introduction to Social Work, Social Justice and Social Issues</p> <p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>	<p>3 credits</p>
<p>WGS202</p>	<p>Women's Leadership in the 21st Century</p> <p>This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership styles and agendas.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • CST183 Representations of Race and Gender • WGS101 Introduction to Women's and Gender Studies 	<p>3 credits</p>
<p>WGS210</p>	<p>Narratives of Girlhood: Perils and Possibilities</p> <p>Girlhood is a condition of precarity and potential. Through close study of multiple narratives and analyses, this course asks: How do intersectional identity categories impact girls' ability to navigate adolescence? What health and safety challenges do girls face? How might social institutions evolve to care for and empower girls?</p>	<p>3 credits</p>
<p>WGS365</p>	<p>Gendered Resistance, Riots, and Rebellions</p> <p>This course explores gendered resistance to social, political, and economic inequalities from the twentieth century through the present. The class examines leaders and issues in both organized movements, as well as events often labeled as riots or rebellions, and considers how we understand different attempts to challenge systems of power.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG105 First-Year Writing • WGS101 Introduction to Women's and Gender Studies 	<p>3 credits</p>

Accelerated Master of Food Studies EARTH (MA)

This program is designed for students who have taken sufficient relevant credits at a high enough level, in their bachelors and previous education, to complete a masters of Food Studies in one year with the minimum requirement of 31 credits. The program includes core course requirements (10 credits) in food systems, food access and research methods. Each student will complete a minimum of six classes (18 credits) demonstrating knowledge and experience in food studies in a focused area of expertise. Area of expertise include but is not limited to: food politics, food market and marketing, sustainable agriculture, and food writing and communication. Finally each student will undertake a summer internship (3 credits) working with a US-based organization, including businesses, not-for-profit organizations, and government. Most opportunities will be in the Southwestern Pennsylvania area. Students in the program will obtain an understanding of how food is grown, treated, harvested, sold, purchased, consumed, shared, and disposed of. As well as an understanding of the impact it has on its suppliers, consumers, and environment.

Admission Requirements

The following are requirements of admission to the Master of Food Studies program:

- A baccalaureate degree from an accredited college or university
- Overall grade point average (GPA) of 3.0 or better on a 4.0 scale. Applicants with less than a 3.0 who show extreme promise through other achievements may be granted conditional admission.
- Official undergraduate and graduate transcripts
- 2 letters of recommendation preferably from an academic source
- Curriculum vitae or resume
- Personal statement -- both stating your experiences and interests in food, sustainability and/or agriculture and your reasons for pursuing a graduate degree
- Additional writing sample submission encouraged but optional
- Completed Application Form, which can be found at <http://apply.chatham.edu>.

Admission Deadlines

- Priority Deadline for Fall - **February 1** (all application materials must be received by this date for first consideration of fellowships/assistantships)
- Regular Application Deadline for Fall - **June 15**
- Regular Application Deadline for Spring - **November 1**

Learning Outcomes

Interdisciplinary breadth: Graduates will have the ability to articulate and integrate knowledge and skills across and within a variety of disciplines, particularly as these skills relate to the historical and contemporary

organization of food provision and consumption.

Systems knowledge: Graduates will have a command of food systems as a conceptual and practical tool for understanding the connections between agriculture and food production, social configurations, cultural meanings, and environmental conditions. This goal includes understanding and applying various research methods to real-world problems.

Experiential learning: Graduates will form a direct relationship with the subject matter – the production of food – by participating in a wide variety of practical and applied situations. Mastery of technique, while significant in its own right, will be connected back to intellectual growth by evaluating its benefit to specific communities and by incorporating the experience into project outcomes.

Community building: Graduates will work as liaisons and collaborators in community-based projects, both in directed coursework and in internship and field experiences. Emphasis will be on task negotiation, network development, social interaction, and cultural acumen.

Communicative competence: Graduates will demonstrate ability to use history, ethics, culture, and empirical data to document and evaluate food systems through oral, written, and multi-modal means of representation.

Methodological depth: Graduates will design and carry out research projects after evaluating the effectiveness and applicability of various social scientific methods. By implementation, students will articulate research questions, assess the strengths and weaknesses of different research design and collection methods. Includes the ability to address cultural and ethical issues, evaluate existing studies and

Applied scientific literacy: Graduates will grasp basic scientific principles, empirical methods, and evaluative criteria in the biological and physical sciences. The goal is for students to analyze and evaluate empirical research for context-specific applications and communicate that data for a variety of audiences.

Technical competence in food production: Students will gain basic experience in growing, producing, and cooking food. From soil testing to knife skills, graduates will grasp the specific material competencies related to agriculture and cooking.

Comprehensive awareness of sustainability: Graduates will be versed in the complexities of defining and enacting sustainable practices related to food production and consumption. Using a systems analysis, they will be able to map the relationships between environment, social life, and sustenance.

Curriculum

Major Requirements

10 credits including tutorial

FST508	Food Systems	3 credits
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Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering

the relationship between communities, agriculture, markets, and consumers.

FST509	Food Access	3 credits
<p>If food is a basic human right, how do societies create universal access to food? What is the moral ethical basis for making citizens food secure in an age of global inequality? To what extent does providing food access need to consider culturally appropriateness, nutrition, and sustainability, and justice?</p>		
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FST620	Research in Food and Agriculture	2 credits
<p>This course assists students developing a research, educational, public policy, or advocacy project in sustainable farming. Participants study a practical and current sustainable food and/or farming problem, review the literature related to the problem, develop management tactics and strategies to address the problem, and communicate their conclusions. Goal is to develop a research plan and project outcomes for a Masters thesis or project.</p>		
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FST510	Food, Culture, History	3 credits
<p>Provides an overview of food and diet in transnational history, emphasizing cultural impact of modernity of food gathering, farming, plant biology, the body and consumption, health, taste, and cuisine. Topics include the development of agriculture, the causes of famine, the disruptions of colonialism, global exchange, industrialization, migration, and commercial economic dominance of the food system.</p>		

Electives

Six electives (18 credits)

FST513	Integrated Seminar in Applied and Environmental Microbiology	3 credits
<p>This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.</p>		
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FST605	Food and Climate Change	3 credits
<p>This course considers the relationship between Earth's changing climate and the human production and consumption of food. With attention to current theories and case studies, students will develop a comprehensive understanding of food systems in relation to global environmental change, with a specific focus on livelihoods, adaptation, sustainability, and justice.</p>		
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SUS580	Sustainable Behavior Change	3 credits
<p>This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.</p>		

SUS605	Leadership for Transitions to Sustainability This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.	3 credits
SUS516	Sustainable Decision Analysis The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.	3 credits
SUS521	Ecotoxicology and Environmental Health Human health is intimately connected to environmental conditions and ecosystem integrity. Introducing concepts and measures of ecosystem and human health, this course will cover the principles and practice of contributing fields including ecotoxicology, epidemiology, environmental health and risk assessment. Students will be led from inquiry to action for key issues.	3 credits
SUS640	Sustainable Community Development This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access • SUS504 Foundations of Sustainability 	3 credits
SUS622	Engaging Animals This course considers human-other animal engagements and how these affect sustainability. We first make sense of what "engaging animals" means, focusing on human-animal relations at different scales and levels cross-culturally, and then consider the impact on sustainability. We end with a student-led symposium on a specific human-animal relationship in relation to sustainability.	3 credits
FST520	Basic Agroecology Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	3 credits

FST575	Field Ecology	3 credits
<p>The goal of this course is to introduce the students to the principles of ecology in urban and rural environments. Initially there will be a series of lectures to study ecological concepts, with extensive reading and discussion from the primary literature. The students will gain the understanding of how the physical environment, global cycles and climate influence the biogeographical distribution of global and regional ecosystems and local microhabitats. Lectures will focus on the physical environment, plant and animal adaptations, population ecology and community dynamics. One-half of the classes will consist of field trips to observe flora and fauna, practice plant and animal data collection techniques using standard field methods, and to study human ecology and the impacts of population growth and resource consumption.</p>		
FST505	Food and Representations	3 credits
<p>Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.</p>		
FST512	Practical Nutrition	3 credits
<p>Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.</p>		
FST513	Integrated Seminar in Applied and Environmental Microbiology	3 credits
<p>This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.</p>		
FST605	Food and Climate Change	3 credits
<p>This course considers the relationship between Earth's changing climate and the human production and consumption of food. With attention to current theories and case studies, students will develop a comprehensive understanding of food systems in relation to global environmental change, with a specific focus on livelihoods, adaptation, sustainability, and justice.</p>		
FST609	Dairy: From Pasture to Plate	3 credits
<p>This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and political issues related to dairy production in the US. Key course themes include: dairy history; sustainable and conventional production; raw milk and consumption debates; livestock care; milking; cheese-making; dairy policy; international issues; and popular representation of dairy.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems 		

- FST509 Food Access
- Complete all 2 of the following courses:
- FST508 Food Systems
 - FST509 Food Access

FST615 Food, Labor, and Inequality 3 credits

In this course, we will focus on theoretical and applied frameworks for thinking about the labor of growing food, transporting it, transforming it into comestibles, and finally, serving and cleaning related to food consumption. The course considers how global labor shapes the availability and appropriateness of food for different populations and therefore includes a substantial analysis of gender, race, and social class. Readings and discussion will touch on migrant labor, domestic cooking, waiting and serving, agriculture, cooks and chefs, and food professionals.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST508 Food Systems

FST625 U.S. Agricultural Policy 3 credits

This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST508 Food Systems

FST524 Greenhouse Production 3 credits

Students will explore alternative season extension practices used in cold season production and compare the opportunities available to local farmers who choose to adopt season extension practices. Through class lectures and assignments students will learn the essentials of healthy soil, pest and disease identification, planting, harvesting and marketing opportunities available to sustainable farmers. Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable greenhouse growing with theory presented in class.

Pre-requisites Complete the following course:

- FST520 Basic Agroecology

FST608 Culture and Culinary Grains 3 credits

Culture and Culinary Grains

FST518	Business of Food and Agriculture	3 credits
<p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <li style="padding-left: 20px;">Complete any 1 of the following courses: • FST509 Food Access • FST509 Food Access 		
FST532	Sustainable Meat Production	3 credits
<p>As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.</p>		
FST603	Food Journeys	3 credits
<p>From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 		
FST607	Sustainable Consumption	3 credits
<p>Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <li style="padding-left: 20px;">Complete any 1 of the following courses: • FST509 Food Access • FST509 Food Access 		

FST611	Religion, Community, and Food	3 credits
<p>This course explains the ways in which sustainability and communal religious life have intersected in the U.S. from the 17th century to the present. Using lecture readings, film, and independent research, we will study ethical farming practices, food sustainability, and moral food choices through the lens of American religious communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • FST508 Food Systems 		
SUS580	Sustainable Behavior Change	3 credits
<p>This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.</p>		
SUS605	Leadership for Transitions to Sustainability	3 credits
<p>This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.</p>		
SUS516	Sustainable Decision Analysis	3 credits
<p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>		
BUS570	Global Business	3 credits
<p>This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.</p>		
BUS641	Sustainable Supply Chain Management	3 credits
<p>This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.</p>		

FST518 Business of Food and Agriculture**3 credits**

In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST508 Food Systems
- Complete any 1 of the following courses:
- FST509 Food Access
- FST509 Food Access

SUS562 Economics of the Environment**3 credits**

This course is designed to introduce you to how economists think about the environment. The theory of externalities and market failure provide the basis for applying microeconomic concepts to the study of environmental issues. Analytical tools, particularly cost-benefit analysis, are explained and applied to problems with environmental dimensions.

FST503 Urban Agriculture**3 credits**

The Urban Agriculture course focuses on the practices and models of urban agriculture in a variety of different global contexts with an emphasis on Pittsburgh, PA. The course uses a lens of political ecology to understand the historical, cultural, ecological, and political factors that influence the practice of urban agriculture.

Internship

3 credits

Each student is expected to complete a three credit internship, in the region, in the summer after their two semesters of course work.

Accelerated Master of Sustainability EARTH (MSUS)

This program is designed for students who have taken sufficient relevant credits at a high enough level, in their bachelors and previous education, to complete a masters of sustainability in one year with the minimum requirement of 31 credits. The program includes core course requirements (10 credits) in sustainability & systems, research methods and political economy. Each student will complete a minimum of six classes (18 credits) demonstrating knowledge and experience in sustainability in the US context in a focused area of expertise. Area of expertise include but is not limited to: Water resource management, Communications and media studies, Community health, Food systems, and Business and management.

Finally each student will undertake a summer internship (3 credits) working with a US-based organization, including businesses, not-for-profit organizations, and government. Most opportunities will be in the Southwestern Pennsylvania area.

Students in the program will learn to address the challenges of applying sustainability principles across all aspects of society, from the local level to emerging global initiatives. This program will develop the knowledge and practical skills necessary to manage the complex challenges posed by sustainability.

Admission Requirements

The following are requirements of admission to the Master of Sustainability program:

- Educational Prerequisites:
 - Bachelor's degree from an accredited academic institution
 - Overall grade point average (GPA) of 3.3 or better on a 4.0 scale
 - Preference for applicants with coursework and/or experience demonstrating capacity for transdisciplinary thought
- Two letters of recommendation from faculty or direct work supervisors that describe the applicant's:
 - Capacity for independent thinking
 - Written and verbal communication skills
 - Ability to thrive in a collaborative, transdisciplinary academic settings
 - Commitment to a career advancing sustainability
- Essay/Letter: Each applicant should submit a one- or two-page letter than explains the origins of their interest in sustainability and professional goals
- Curriculum vitae or resume
- Completed Application Form, which can be found at <http://apply.chatham.edu>

Admission Deadlines

- Priority Deadline – **February 1** (all application materials must be received by this date for first consideration of fellowships/assistantships)
- Regular Application Deadline – **July 1**

Learning Outcomes

The goal of the Master of Sustainability is to provide professionally oriented students the skills, knowledge, experiences, and networks necessary to meet their career goals. To that end, we produce graduates recognized for their:

- intellectual and experiential core of knowledge about sustainability;
 - preparedness to champion and implement sustainability in a variety of settings;
 - entrepreneurial spirit and capacity for transformative leadership; and
 - commitment to ethical and informed citizenship
- To that end, our curriculum is designed to achieve a number of learning outcomes that include:

COMMUNICATION

Students will become effective communicators by evaluating and implementing appropriate communication strategies. They will develop written, oral, and visual tools and practices for communicating about sustainability to diverse audiences.

TEAMWORK AND TRANSFORMATIVE LEADERSHIP

Students will be prepared to take an active role in advancing sustainability, with the understanding that to do so will require behavioral, cultural, institutional, and other changes at multiple spatial and temporal scales.

CREATIVITY

Students will understand that facilitating sustainable attitudes and practices requires creativity in conceptualizing existing conditions and generating and implementing sustainable solutions to complex problems.

ETHICS

Students will understand ethical implications of decisions and actions across diverse cultural, political, and temporal perspectives and be prepared to choose and act with integrity in their careers.

CONCEPTUALIZING SUSTAINABILITY

Students will be able to explain the origins, meanings, and applications of sustainability, and by extension, explain the interrelationships among environmental, societal, and economic well-being. They will do this in a framework that recognizes the cultural dimensions of sustainability.

SYSTEMS THINKING

Students will develop tools to model complex systems, describe the impact of changes within systems, consider the impacts of decision-making on systems, and analyze a system's strengths and weaknesses.

TRANSDISCIPLINARITY AND COLLABORATION

Students will work across knowledge bases to better understand how different individuals and groups make decisions and work collaboratively with partners in the private sector, public sector, and academia. In these contexts, students will also learn how to apply the appropriate resources and methods to sustainability projects.

APPLICATION AND ASSESSMENT

Students will develop the necessary analytical skills for applying and assessing sustainability in a range of settings.

Curriculum

Major Requirements

Including the Integrative Capstone (10 credits)

SUS502	Sustainability and Systems In this course, students will develop skills necessary to understand, describe, and communicate complex systems. Working from examples, exercise and interactive discussions, students will learn to identify key drivers and leverage points for change. Students will learn to solicit useful information, model, and enact change using a various systems-based tools.	3 credits
SUS511	Project Design, Methods, and Evaluations	3 credits
SUS512	Sustainability in Pittsburgh Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". This course will provide a brief socio-ecological history then will visit various places and people that highlight the diversity in how Pittsburgh is striving to become a model of a sustainable city.	3 credits
SUS602	The Political Economy of Sustainability This course will examine the economic dimensions of environmental change through the frameworks of political ecology, political economy, development studies, and sustainability. Through case studies and current theory, we will investigate the costs, benefits, and sustainability of environmental governance. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • SUS502 Sustainability and Systems Complete any 1 of the following courses: • SUS501 Fundamentals of Sustainability • SUS503 Understanding Knowledge Across the Disciplines • SUS504 Foundations of Sustainability 	3 credits

Electives

Six electives (18 credits)

FST513	Integrated Seminar in Applied and Environmental Microbiology This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.	3 credits
FST605	Food and Climate Change This course considers the relationship between Earth's changing climate and the human production and consumption of food. With attention to current theories and case studies, students will develop a comprehensive understanding of food systems in relation to global environmental change, with a specific focus on livelihoods, adaptation, sustainability, and justice.	3 credits
SUS580	Sustainable Behavior Change This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	3 credits
SUS605	Leadership for Transitions to Sustainability This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.	3 credits
SUS516	Sustainable Decision Analysis The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.	3 credits
SUS521	Ecotoxicology and Environmental Health Human health is intimately connected to environmental conditions and ecosystem integrity. Introducing concepts and measures of ecosystem and human health, this course will cover the principles and practice of contributing fields including ecotoxicology, epidemiology, environmental health and risk assessment. Students will be led from inquiry to action for key issues.	3 credits

SUS640	Sustainable Community Development	3 credits
<p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access • SUS504 Foundations of Sustainability 		
SUS622	Engaging Animals	3 credits
<p>This course considers human-other animal engagements and how these affect sustainability. We first make sense of what "engaging animals" means, focusing on human-animal relations at different scales and levels cross-culturally, and then consider the impact on sustainability. We end with a student-led symposium on a specific human-animal relationship in relation to sustainability.</p>		
FST575	Field Ecology	3 credits
<p>The goal of this course is to introduce the students to the principles of ecology in urban and rural environments. Initially there will be a series of lectures to study ecological concepts, with extensive reading and discussion from the primary literature. The students will gain the understanding of how the physical environment, global cycles and climate influence the biogeographical distribution of global and regional ecosystems and local microhabitats. Lectures will focus on the physical environment, plant and animal adaptations, population ecology and community dynamics. One-half of the classes will consist of field trips to observe flora and fauna, practice plant and animal data collection techniques using standard field methods, and to study human ecology and the impacts of population growth and resource consumption.</p>		
FST505	Food and Representations	3 credits
<p>Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.</p>		
FST512	Practical Nutrition	3 credits
<p>Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.</p>		

FST513	<p>Integrated Seminar in Applied and Environmental Microbiology</p> <p>This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.</p>	3 credits
FST605	<p>Food and Climate Change</p> <p>This course considers the relationship between Earth's changing climate and the human production and consumption of food. With attention to current theories and case studies, students will develop a comprehensive understanding of food systems in relation to global environmental change, with a specific focus on livelihoods, adaptation, sustainability, and justice.</p>	3 credits
FST609	<p>Dairy: From Pasture to Plate</p> <p>This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and political issues related to dairy production in the US. Key course themes include: dairy history; sustainable and conventional production; raw milk and consumption debates; livestock care; milking; cheese-making; dairy policy; international issues; and popular representation of dairy.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 	3 credits
FST615	<p>Food, Labor, and Inequality</p> <p>In this course, we will focus on theoretical and applied frameworks for thinking about the labor of growing food, transporting it, transforming it into comestibles, and finally, serving and cleaning related to food consumption. The course considers how global labor shapes the availability and appropriateness of food for different populations and therefore includes a substantial analysis of gender, race, and social class. Readings and discussion will touch on migrant labor, domestic cooking, waiting and serving, agriculture, cooks and chefs, and food professionals.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems 	3 credits
FST625	<p>U.S. Agricultural Policy</p> <p>This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems 	3 credits

- FST508 Food Systems

FST524	Greenhouse Production	3 credits
<p>Students will explore alternative season extension practices used in cold season production and compare the opportunities available to local farmers who choose to adopt season extension practices. Through class lectures and assignments students will learn the essentials of healthy soil, pest and disease identification, planting, harvesting and marketing opportunities available to sustainable farmers. Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable greenhouse growing with theory presented in class.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • FST520 Basic Agroecology 		
FST608	Culture and Culinary Grains	3 credits
<p>Culture and Culinary Grains</p>		
FST518	Business of Food and Agriculture	3 credits
<p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems Complete any 1 of the following courses: • FST509 Food Access • FST509 Food Access 		
FST532	Sustainable Meat Production	3 credits
<p>As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.</p>		
FST603	Food Journeys	3 credits
<p>From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 		

FST607	Sustainable Consumption	3 credits
<p>Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 		
FST611	Religion, Community, and Food	3 credits
<p>This course explains the ways in which sustainability and communal religious life have intersected in the U.S. from the 17th century to the present. Using lecture readings, film, and independent research, we will study ethical farming practices, food sustainability, and moral food choices through the lens of American religious communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • FST508 Food Systems 		
SUS580	Sustainable Behavior Change	3 credits
<p>This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.</p>		
SUS605	Leadership for Transitions to Sustainability	3 credits
<p>This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.</p>		
SUS516	Sustainable Decision Analysis	3 credits
<p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>		

BUS570	Global Business	3 credits
<p>This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.</p>		
BUS641	Sustainable Supply Chain Management	3 credits
<p>This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.</p>		
FST518	Business of Food and Agriculture	3 credits
<p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 		
SUS562	Economics of the Environment	3 credits
<p>This course is designed to introduce you to how economists think about the environment. The theory of externalities and market failure provide the basis for applying microeconomic concepts to the study of environmental issues. Analytical tools, particularly cost-benefit analysis, are explained and applied to problems with environmental dimensions.</p>		

Internship

3 credits

Each student is expected to complete a three credit internship, in the region, in the summer after their two semesters of course work.

2022-2023 Course Catalog

Biomedical Studies (MA)

The Master of Arts in Biomedical Studies is a one-year, accelerated degree, primarily for students wishing to improve credentials for admission into medical, dental, or physician assistant programs, or other allied health programs. Students complete a total eleven courses (nine required, two elective 31-32 credits), which enhance highly sought professional skills.

Curriculum

Major Requirements

BIO512	Advanced Human Gross Anatomy An in-depth study of both regional gross human anatomic structures & cellular level tissue. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary & reproductive systems. Regional study of the head/neck, trunk, and upper/lower extremities, is accomplished through human cadaver dissection.	3 credits
BIO512L	Advanced Human Gross Anatomy Lab The laboratory compliment to BIO512, this course uses human cadavers to facilitate a deeper appreciation for regional gross human anatomic structures. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary and reproductive systems, via regional study of the head/neck, trunk, and upper/lower extremities. Co-requisites <ul style="list-style-type: none">• BIO512 Advanced Human Gross Anatomy	2 credits
BIO514	Advanced Human Physiology An in-depth study of the mechanisms of human body function, emphasizing cells, genetic control of protein synthesis, transport across membranes, contraction and excitation of muscles, the physiology of cardiac muscle, and rhythmical excitation of the normal heart.	3 credits
BIO516	Advanced Neuroscience A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control of movement. Three hours of class per week.	3 credits

BIO516L	Advanced Neuroscience Lab	2 credits
<p>This lab complements the lectures in BIO516, using hands-on laboratory and data collection exercises. It examines nervous system function, emphasizing excitability, synaptic transmission and neuron-target interactions. It also includes a study of integrative neural function in sensory, motor, learning, memory and limbic systems. Two hours of laboratory per week.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • BIO516 Advanced Neuroscience 		
BIO612L	Cadaver Dissection Lab	3 credits
<p>This course presents an extensive overview of gross human anatomic structure, through cadaver dissection, emphasizing the thoracic and abdominal viscera, as well as the musculoskeletal and neuromuscular systems. Evident pathologies are highlighted when present. Strong emphasis is placed upon the development of excellent dissection skills and practices.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO512 Advanced Human Gross Anatomy • BIO512L Advanced Human Gross Anatomy Lab 		
BIO630	Biological Research Principles	3 credits
<p>This course provides students with a foundation in biological research principles, covering ethics, professional development, writing, research design, data analysis, and research proposal development. These are essential scientific components for any graduate student in the biological sciences.</p>		
BIO538	Biochemistry I	3 credits
<p>This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.</p>		
OR		
BIO539	Biochemistry II	3 credits
<p>This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.</p>		

One of:

BIO517	Genetics A study of the modern concepts of the gene. Lectures stress theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations.	3 credits
BIO519	Immunology This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week.	3 credits
BIO558	Histology A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbook, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.	3 credits
BIO561	Pharmacology This course covers the general principles of drug action, including administration, distribution, mechanism, and excretion. Emphasis will be placed on key pharmacological concepts, basic signal transduction pathways and molecular mechanisms. Pharmacology of the nervous, cardiovascular, and endocrine systems as well as the mechanisms of various antimicrobial agents will be considered.	3 credits

Electives

6 credits

Two of any any course above, or

BIO508	Developmental Biology A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.	3 credits
BIO532	Biostatistics The study and application of biostatistics and probability distributions in biology, for students who already have a working knowledge of statistics and want to understand the place and application of biostatistical methods in science. Topics include hypothesis testing, analysis of variance for one and many variables, and linear and nonlinear regression. Three hours of class per week.	3 credits

BIO555	Medical and Bio-ethics This course will discuss selected topics in medical ethics emphasizing methods of ethical reasoning about moral dilemmas and contributions of philosophical theories and principles to practical problems of medicine. Includes legal aspects of health care decisions.	3 credits
BIO562	Cardiometabolic Disease This course is a focused course extending the concepts related to human physiology. It is expected that each student has an advanced knowledge of the physiological systems of the body as well as basic understanding of the pathophysiology related to cardiovascular and metabolic disease.	3 credits
BIO693	Independent Study Independent Study Pre-requisites Complete the following course: • XXX123 Permission of Instructor	3 credits
FST512	Practical Nutrition Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.	3 credits
HCI502	Healthcare Delivery Systems In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.	3 credits
HCI503	Informatics Foundation and Health Care Technology This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.	3 credits
HCI506	Health Policy and Informatics This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.	3 credits

PSY503	Applied Biological Psychology	3 credits
<p>The course addresses biological aspects of human psychology, including the biological basis of neurological deficits and mental disorders, and the use psychotropic medications for treating mental illnesses. Topics also include stress and health, mental disorders such as depression, anxiety, and schizophrenia, and contemporary issues in biological psychology.</p>		
PSY530	Introduction to Sport and Exercise Psychology	3 credits
<p>This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.</p>		
PSY629	Human Development across the Life Span	3 credits
<p>The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.</p>		
PSY635	Concepts of Mental Health and Illness	3 credits
<p>The course provides an overview of concepts of mental health and its development, and of the etiologies of psychopathology, from a culturally sensitive perspective. Students learn to recognize the complex biological and environmental contributors to mental illness, and to evaluate effective treatment approaches for mental illness.</p>		
PSY663	Foundations of Health Psychology	3 credits
<p>Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.</p>		

2022-2023 Course Catalog

BSN to DNP (BSN-DNP)

The BSN to DNP Integrated Degree Executive Track allows the student to complete two graduate degrees in 53 credits. The MSN component prepares the student for nursing leadership roles and the DNP component has the student develop, complete and evaluate an executive level project to demonstrate the knowledge and skills of the terminal nursing degree. A total of 1000 practice experience hours will be completed.

Admission Requirements

1. Completed free online application: apply.chatham.edu
2. Copy of official transcripts of all completed college level coursework from all schools attended with proof of completion of an BSN degree with a minimum 3.0 GPA
3. Proof of active, unencumbered RN license in your state
4. Current résumé/curriculum vitae
5. Admissions essay (to be mailed or e-mailed as a Word document to GradAdmission@chatham.edu):
 - Describe a clinical problem in your practice setting that you could impact as a nurse executive using evidence-based intervention(s) and explain why it is a problem warranting change to impact patient and/or organizational outcomes.
6. Interviews may be requested (to be held in person, over the phone, or via Skype)
7. Two professional letters of reference

Admissions Materials may be submitted to:

Chatham University
Berry Hall/SCPS Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: GradAdmission@chatham.edu

Learning Outcomes

MSN Program Outcomes

1. Integrate scientific findings from nursing and other fields for continual improvement of nursing care.
2. Synthesize organizational and systems leadership principles to promote high quality and safe patient care.
3. Implement methods and tools of QI principles to promote high quality and safe patient care.
4. Critique EB literature with a basic understanding of quantitative and qualitative research to guide

decision-making.

5. Analyze current and emerging trends and technologies to support quality health care.
6. Analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state and national level based on understanding of health policy and principles of advocacy.
7. Construct effective communication strategies for working effectively in teams and collaboratively with other health care providers.
8. Design evidence-based and culturally relevant clinical prevention interventions.
9. Conduct a comprehensive and systematic assessment as a basis for decision-making.
10. Obtain expertise in the role of educator, informatics and leadership.

DNP Program Outcomes

1. Apply interprofessional collaboration concepts for improving patient and population health outcomes.
2. Synthesize nursing research and integration of best practice for change in professional practice based on scientific underpinnings for practice.
3. Integrates clinical scholarship and analytical methods for evidence-based practice.
4. Impact health care outcomes through clinical prevention and population health for improving the nation's health.
5. Integrate nursing science as the basis for the highest level of nursing practice.
6. Develop and evaluates new practice approaches based on nursing theory and theories borrowed from other disciplines.
7. Provide clinical nursing change through organizational and systems leadership for quality improvement and systems thinking.
8. Utilize information systems/technology and patient care technology to improve and transform health care.
9. Integrate health policy and ethics to improve health care outcomes through advocacy roles.

Curriculum

Major Requirements

53 credits

NUR501	Scientific Underpinnings for Practice	3 credits
	This course examines principles and processes of evidence based practice as a strategy to guide clinical decision making, initiate practice change and improve nursing practice, including translating, evaluating and disseminating the evidence. Course elements include gaining knowledge of research design, statistical concepts and search strategies.	
<hr/>		
NUR504	Introduction to Organizational Leadership in Nursing	3 credits
	Emphasizing leadership decision making, this course includes an overview of theories, research, and applications that focus on managing organizational behavior, quality improvement, and systems leadership across health care delivery systems. Students will learn how patient care systems are structured, processes developed, and outcomes	

affected by actions of leaders and employees.

NUR505	Health Assessment and Promotion Across the Lifespan	3 credits
	<p>This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. The role of gender, genetics, and cultural influences in the context of health assessment and promotion will also be analyzed.</p>	
NUR703	Ethics and Public Policy in Healthcare Delivery	3 credits
	<p>This course focuses on ethical issues and public policy in healthcare. Students develop strategies to manage ethical dilemmas and analyze health policy to educate, advocate and provide leadership in shaping healthcare policy.</p>	
NUR706	Communication and Collaboration for Health Care Leadership	3 credits
	<p>This course focuses on strategies to improve professional communication with peers, subordinates, and patients in the health care environment.</p>	
NUR707	Information Technology and Data-Driven Decision Making	3 credits
	<p>This course provides students with an opportunity to examine the value of technology and information systems to support evidence-based practice, guidelines and policy across various health settings. Various methods for gathering, managing, and synthesizing data will be introduced in order to conduct analyses for quality improvement, financial and outcome evaluations.</p>	
NUR630	Health Care Economics and Financial Management	3 credits
	<p>The Health Care Economics and Financial Management course focuses on examination and understanding of health care financing and reimbursement concepts preparing a world ready nurse leader to function in a variety of health care delivery settings. Content focuses on concepts of budget and leadership management, influencing policy makers, and linking patient care outcomes to resource management.</p>	
NUR640	Leadership for Change	3 credits
	<p>This course focuses on the needs of health care leaders to take health care delivery into the future through creative, innovative design initiatives focusing on a consumer driven health care delivery system. Content includes: variables impacting health care delivery systems, reimbursement and funding for design change, managing competition, and managing human and financial resources.</p>	
NUR650	Leadership and Health Care Operations	3 credits
	<p>This course provides an overview of three distinct and necessary areas of leadership knowledge with an emphasis on managerial decision-making including legal aspects of health care, human resource management, and health policy. Students will work through specific scenarios in each of these areas to identify legal, ethical, and political issues.</p>	

NUR700	Structure & App of Contemporary Nursing Knowledge	3 credits
	This course introduces the advanced practice nurse to the world of contemporary nursing knowledge, as formalized in conceptual models of nursing and nursing theories applied to clinical practice. There is emphasis on the metaparadigm, philosophies, conceptual models, theories, and empirical indicators linking them to clinical practice.	
NUR702	Developing Evidence-Based Practice	3 credits
	This course prepares students with skills and competencies needed to build and assimilate knowledge for establishing a scholarly trajectory at a high level of complexity. This clinical course consists of 125 clinical hours and is the foundation for the culminating Capstone project focusing on improving practice.	
NUR704	Quality Improvement in Health Care	3 credits
	This course focuses on quality improvement initiatives, including the protection of human subjects. The emphasis is on skills and competencies needed to provide leadership in quality and systems change. This course includes 125 clinical hours and is the foundation for the culminating Capstone project focusing on improved practice and outcomes.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • NUR700 Structure & App of Contemporary Nursing Knowledge • NUR702 Developing Evidence-Based Practice 	
NUR705	Advancing Practice: Scholarship and Grant Writing	3 credits
	This course provides further investigation of evidence-based practice advancing nursing leadership and clinical outcomes. Students will develop skills for clinical scholarship including manuscript development and grant writing.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • NUR707 Information Technology and Data-Driven Decision Making 	
NUR799	Capstone Experience	6 credits
	This course provides an opportunity for the student to implement and evaluate a planned evidence-based practice change project. This project lays the groundwork for future scholarship. This course culminates in a tangible and deliverable academic product derived from the practice immersion experience. A total of 250 clinical hours are included in the course.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • NUR707 Information Technology and Data-Driven Decision Making 	

2022-2023 Course Catalog

Doctor of Nursing Practice (DNP)

The Doctor of Nursing Practice (DNP) is a clinical doctorate that prepares nurses to practice as clinical leaders in the health care delivery system. Graduates of the DNP program have a skill set and competencies to function in clinical leadership roles depending on student interest and career trajectory.

The DNP program at Chatham University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001 (202) 463-6930.

Program Structure:

The DNP program is a low-residency, writing intensive, online program. Students can complete the 27 credit DNP program in 12 months of full time study, including 500 supervised practice experience hours. Part-time study also is available. The program includes a mandatory on-campus residency and culminates in an evidence-based practice clinical immersion capstone experience. Practice experiences are completed at approved practice experience sites with the guidance of an approved preceptor. Cohorts are admitted each Fall and Spring.

[Approved DNP Practice Experience Categories by Course](#)

Admission Requirements

We evaluate all DNP applications on a rolling basis, however we recommend that interested applicants apply as early as possible. A limited number of seats are available and the cohort typically fills each semester.

Submit your online application directly to Chatham University at <https://apply.chatham.edu>. Once your online application is complete, please submit all required application documents (listed below) to:

*Chatham University
Berry Hall/SCPS Admission
Woodland Road
Pittsburgh, PA 15232*

Requirements:

- Online application submitted directly to Chatham University at <https://apply.chatham.edu>.
- Official academic transcripts from all colleges or universities previously attended.
- Applicant must have completed Master of Science in Nursing degree - cumulative G.P.A. of 3.0 or greater
- Copy of Resume or Curriculum Vitae
- Copy of current RN license

- Two letters of professional recommendation addressing the candidate's strengths, and ability to succeed in the program. [Click here to download the recommendation form](#)
- **Describe a clinical problem in your practice setting and explain why it is a problem warranting a change to impact patient and or organizational outcomes.**

*The essay should be at least 500 words and professional, not personal. While you may not currently function in a direct care role, please be sure your problem can be tied to patient outcomes. The problem you address in the essay is subject to faculty approval once enrolled in the DNP program and may or may not serve as your DNP project's focus. You may use citations and references to support your essay. Essays should be written according to APA Style 7th Edition and free from spelling and grammatical errors. A phone or videoconferencing interview may be requested.

- Documentation of Clinical Experience:

- As the DNP degree is a clinical doctorate, the 1000 post-baccalaureate practice experience hour requirement as stated in The Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006) must be strictly adhered to and the hours must be completed in a healthcare setting prior to degree conferral. Since Chatham's program is a post-masters DNP program, Chatham requires that each applicant provides sufficient and accurate evidence of the completion of 500 supervised hours achieved post-baccalaureate, and already completed upon entering into Chatham's DNP program. While enrolled in the DNP program, the remaining 500 supervised hours will be completed. Applicants that have earned an advanced practice certification (e.g. NP, CRNA*, CNS, and CNM) must provide a copy of their current national certification as evidence of having completed 500 supervised practice experience hours since completing a baccalaureate nursing education program. *NBCRNA certificate holders must submit a copy of their NBCRNA transcript as provided by NBCRNA. This transcript will specifically reference the number of practice hours in the applicant's program.
- Applicants who have not yet earned an advanced practice certification must provide a thorough description of the supervised practice experience hours completed while enrolled in an NP, CRNA, CNS, or CNM program as validated by an official transcript.

Acceptable descriptions include:

1. Course syllabi that demonstrate the number of practice experience hours required in each course,
 2. Official practice experience logs which record the practice experience hours in each course,
 3. An official letter from the Master's program director, and
 4. An official letter from the mentor who supervised the required practice experience hours.
- Students who have not completed a master's curriculum inclusive of 500 academically supervised practice experience hours may apply to Chatham as a Non-Degree Seeking student to pursue these hours. Chatham offers the course NUR697 Nursing Practice Experience. This course is designed for those planning admission to Chatham University's DNP program and lack the required practice experience hours. There is a one credit, 90-hour, two credit, 170-hour, and three credit, 250 version of the course is available. Students may not take the course twice within the same semester. Students may begin the process of applying for formal DNP admission while enrolled in NUR697. It is important to note that Non-Degree completion of NUR697 does not guarantee or imply automatic admission to the Chatham DNP program. If you have additional questions about registration in this course, please contact the Admission Office at (412) 365-1498.

State Restrictions for Online Learning

Chatham University requires state authorization to provide distance education in states other than their own. Please follow the link below to see if Chatham is authorized to deliver instruction in your state. Also, this program has a required practice experience component. Please check the information in the Practice Experience and Special requirements column to see if the state you plan on completing your practice experience hours is approved or has special restrictions.

[State Authorization for Distance Education and Practical Experiences](#)

Contact

If you have any questions please contact:

Graduate Admission

412-365-1825

GradAdmission@chatham.edu

Learning Outcomes

The graduate:

- Applies interprofessional collaboration concepts for improving patient and population health outcomes.
- Synthesizes nursing research and integration of best practice for change in professional practice based on scientific underpinnings for practice.
- Integrates clinical scholarship and analytical methods for evidence-based practice.
- Impacts health care outcomes through clinical prevention and population health for improving the nation's health.
- Integrates nursing science as the basis for the highest level of nursing practice.
- Develops and evaluates new practice approaches based on nursing theory and theories borrowed from other disciplines.
- Provides clinical nursing change through organizational and systems leadership for quality improvement and systems thinking.
- Utilizes information systems/technology and patient care technology to improve and transform health care.
- Integrates health policy and ethics to improve health care outcomes through advocacy roles.

Curriculum

Degree Requirements

27 Credits

NUR700	Structure & App of Contemporary Nursing Knowledge <p>This course introduces the advanced practice nurse to the world of contemporary nursing knowledge, as formalized in conceptual models of nursing and nursing theories applied to clinical practice. There is emphasis on the metaparadigm, philosophies, conceptual models, theories, and empirical indicators linking them to clinical practice.</p>	3 credits
NUR702	Developing Evidence-Based Practice <p>This course prepares students with skills and competencies needed to build and assimilate knowledge for establishing a scholarly trajectory at a high level of complexity. This clinical course consists of 125 clinical hours and is the foundation for the culminating Capstone project focusing on improving practice.</p>	3 credits
NUR703	Ethics and Public Policy in Healthcare Delivery <p>This course focuses on ethical issues and public policy in healthcare. Students develop strategies to manage ethical dilemmas and analyze health policy to educate, advocate and provide leadership in shaping healthcare policy.</p>	3 credits
NUR704	Quality Improvement in Health Care <p>This course focuses on quality improvement initiatives, including the protection of human subjects. The emphasis is on skills and competencies needed to provide leadership in quality and systems change. This course includes 125 clinical hours and is the foundation for the culminating Capstone project focusing on improved practice and outcomes.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none">• NUR700 Structure & App of Contemporary Nursing Knowledge• NUR702 Developing Evidence-Based Practice	3 credits
NUR705	Advancing Practice: Scholarship and Grant Writing <p>This course provides further investigation of evidence-based practice advancing nursing leadership and clinical outcomes. Students will develop skills for clinical scholarship including manuscript development and grant writing.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• NUR707 Information Technology and Data-Driven Decision Making	3 credits
NUR706	Communication and Collaboration for Health Care Leadership <p>This course focuses on strategies to improve professional communication with peers, subordinates, and patients in the health care environment.</p>	3 credits

NUR707	Information Technology and Data-Driven Decision Making	3 credits
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This course provides students with an opportunity to examine the value of technology and information systems to support evidence-based practice, guidelines and policy across various health settings. Various methods for gathering, managing, and synthesizing data will be introduced in order to conduct analyses for quality improvement, financial and outcome evaluations.

NUR799	Capstone Experience	6 credits
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This course provides an opportunity for the student to implement and evaluate a planned evidence-based practice change project. This project lays the groundwork for future scholarship. This course culminates in a tangible and deliverable academic product derived from the practice immersion experience. A total of 250 clinical hours are included in the course.

Pre-requisites Complete the following course:

- NUR707 Information Technology and Data-Driven Decision Making

Practice Experience Requirements

DNP students are required to complete 500 practice experience hours during the DNP program (NUR 702 - 125 hours, NUR 704 - 125 hours and NUR 799 - 250 hours). The DNP practice experience is an advanced immersion experience that allows DNP students an opportunity that includes, but is not limited to: gaining and applying advanced skills in the clinical setting; linking policy making within clinical systems, or local, regional, or national organizations; translation of evidence-based research into practice through policy or practice innovation; and to serve as change agents in health care delivery settings. Qualified preceptor and program experience site are identified and approved during the first semester of coursework. A signed affiliation agreement with the identified agency and an approved preceptor must be in place with the practice experience agency prior to engaging in practice experiences. It is the responsibility of the student to comply with agency requirements.

Transfer Credits

Given the integrated nature of the courses, all 27 credits of the DNP program must be completed at Chatham University.

Protection of Human Subjects

To ensure for the protection of the rights and welfare of human subjects, all students enrolled in the doctor of nursing practice (DNP) program at Chatham are required to submit their proposed evidence-based practice change project plan to an Institutional Review Board (IRB), or faculty approval substitute, for review and decision prior to implementing any aspect of the project.

BSN to DNP Executive Track

[BSN to DNP Executive Track](#)

2022-2023 Course Catalog

Doctor of Physical Therapy (DPT)

All physical therapy courses are limited to physical therapy students unless permission is obtained from the program director.

The Chatham University Physical Therapy Program educates Doctors of Physical Therapy who will advance the quality of human life through excellence in clinical practice. The Program prepares professionals to meet the challenges of a dynamic health care environment and supports faculty scholarship that bridges science and practice.

The Chatham University Physical Therapy Program offers an exceptionally innovative and student-centered curriculum that promotes critical analysis and produces professionals who are guided by integrity, committed to excellence, and oriented to service. The Program supports practitioners in achieving best practice through scholarly inquiry, dissemination, and outreach.

Designed to prepare graduates to serve as generalists, the curriculum stresses clinical decision making through the study of patient problems typically encountered in the clinical setting. Normal structure and function provide a basis for the study of disease processes and prevention, and the effect of pathology and impairments on function and quality of life. The modified problem-based learning (PBL) curriculum presents the clinical arts and science of physical therapy in an integrated manner organized around body systems.

Chatham University offers a DPT degree upon successful completion of seven terms of study. Candidates follow a sequence of courses that includes 36 weeks of clinical education.

Admission Requirements

How to Apply

Applicants to Chatham University's Doctor of Physical Therapy program must use the Physical Therapy Centralized Application Service (PTCAS). Beginning June 15, 2022, applications may be submitted through [PTCAS](#) with all admission requirements noted below. Please note the GRE is not required, and there is no supplemental application.

Important dates FOR FALL 2023 Admission

Application Deadline: **October 3***

Virtual Admission Interview Date: **Saturday, November 5, 2022** (*by invitation only*)

In order to be eligible for invite to the admission interview:

1. Applicants need to have at least 60% (24 credits) of the ten prerequisites complete by August 31, 2022
2. [PTCAS applications](#) must be e-submitted by October 3*
3. Applications must be PTCAS verified no later than October 15

***It is highly recommended to e-submit your application to PTCAS on or before September 15.**

PTCAS's verification process occurs once an applicant e-submits the application and all official transcripts have been received. Verification involves some processing time, so it is in your best interest to submit all materials as early as possible to ensure your complete, verified application is available for us to review. Only verified applicants will be invited to interview.

ADMISSION REQUIREMENTS

- A completed baccalaureate degree from an accredited institution prior to the beginning of classes.
- Official transcripts from all institutions attended sent directly to PTCAS.
- Overall combined GPA of 3.0 or better on a scale of 4.0 as calculated by PTCAS.
- Prerequisite GPA of 3.0 or better on a 4.0 scale. Additionally, grades less than a "B-" in Anatomy and a "C" in all other courses are not acceptable.
- Prerequisite courses must have been completed no more than ten years prior to the anticipated start date of the program.

2022-23 CYCLE UPDATE: A "Pass" or "Satisfactory" grade for prerequisites will be accepted for coursework completed during the Spring 2020 semester. However, such grades do not impact GPA calculation.

- At least six of ten completed prerequisite courses by August 31, 2022. If admitted, all prerequisites must be complete by July 31, 2023.
- Prerequisite Courses:
 - Biology with lab - two terms
 - Chemistry with lab - two terms
 - Physics with lab - two terms
 - Physiology with lab (prefer human) - one term**
 - Human Anatomy with lab - one term**
 - *****If taking anatomy with physiology, both anatomy & physiology I and II with labs are necessary to fulfill the anatomy and physiology requirements. A grade of B- or better is required in both courses.***
- Statistics or Research Methods - one term
- Developmental Psychology or Lifespan Development – one term
 - Fulfillment of this pre-req requires course content that includes the entire human lifespan from birth to end of life. Individual courses that focus on a specific life period will be accepted (i.e. Childhood Development), as long as additional courses completed span human psychological development from birth to end of life (i.e. Adolescent Development and Aging Adult Development).
- Evidence of volunteer/work experience in a minimum of two different physical therapy locations OR two different physical therapy settings included in the PTCAS application. Please note verification of this experience is not required. Examples of different settings include:
Inpatient
 - Acute Care/Hospital
 - Nursing Home/Skilled Nursing Facility/Extended Care Facility

- Acute/Sub-acute Rehabilitation

Outpatient

- Free-standing PT Clinical/Hospital-based Clinic
- Industrial/Occupational Health

Home Health

School/Pre-school

2022-23 CYCLE UPDATE: *We understand volunteer/work experience may not be accessible due to COVID-19 and are advising affected students to develop insight into the PT profession through alternative ways: interview a PT (may be virtual) or research the field via the [American Physical Therapy Association website](#). Students will not be required to verify their interview or research experiences.*

- Three letters of reference included in the PTCAS application: two academic (faculty or advisor) and one licensed physical therapist OR one academic and two licensed physical therapists
- Attendance at on-campus interview.

INTEGRATED DEGREE PROGRAM

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisors to ensure all requirements are met according to the IDP course of study.

INTERNATIONAL APPLICANTS

International Applicants must submit additional documentation to the Office of Admissions. A list of these documents can be found on the [International Admission](#) web page.

ADMISSION REVIEW PROCESS

After verifying that the minimum academic requirements are met, the physical therapy program faculty reviews each candidate's entire application and invites the most talented and qualified students to interview before program faculty and alumni. As part of the admission review, Chatham reserves the right to request a background check prior to the offer of admission. The physical therapy program strives for diversity and gender equity within each class.

ARTICULATION AGREEMENTS

Chatham University has entered into "Articulation Agreements" with a select group of Colleges and Universities. These agreements provide for additional student pre-professional advisement and possible priority admission status for candidates with exceptional applications, demonstrating academic preparation above the minimal acceptable standards.

Agreements exist with the following institutions for the 2022-2023 academic year:

- Allegheny College
- Baldwin Wallace University

- Grove City College
- Saint Vincent College
- Washington and Jefferson College
- Waynesburg University

Applicants from these institutions are advised to discuss the articulation requirements with their advisor as well as the graduate admission counselor at Chatham University. If you have any questions, please do not hesitate to contact our Admission Department:

Office of Admission

Chatham University
 Woodland Road
 Pittsburgh, PA 15232
 (800) 837-1290
 (412) 365-1394
[Email Admissions](#)

ADMITTED STUDENT PROFILE

Students Beginning Fall 2022

Number Enrolled:	40
Average Overall GPA:	3.66
Average Prerequisite GPA:	3.55
Average Age:	23
Out-of-State Residents:	36%
Females:	62%
Males:	38%

Students Beginning Fall 2021

Number Enrolled:	40
Average Overall GPA:	3.64
Average Prerequisite GPA:	3.62
Average Age:	23
Out-of-State Residents:	37%
Females:	58%
Males:	42%

Learning Outcomes

Graduates will be able to:

- Practice in an ethical, legal, safe, professional, and effective manner
- Screen individuals to determine the need for habilitation, rehabilitation, referral, and/or care to promote fitness, health and wellness
- Effectively examine a patient/client.
- Formulate the physical therapy diagnosis.
- Design a comprehensive physical therapy plan of care.
- Manage a comprehensive plan of care
- Demonstrate effective written, oral, and nonverbal communication with patients/clients and their caregivers, colleagues, other health providers, payers, and the public
- Apply principles of management in the provision of physical therapy to individuals, organizations, and communities
- Apply concepts of teaching and learning theories in designing, implementing, and evaluating learning experiences used in the education of patients/clients, students, colleagues, and the community
- Apply the principles of evidence-based practice to collaborative clinical decision making
- Develop personal and professional self-assessment skills and formulate/implement a career development plan

Curriculum

Degree Requirements

107 credits, including:

BIO502	Human Gross Anatomy An in-depth study of gross human anatomic structure, emphasizing the musculoskeletal and neuromuscular systems through study of head and neck, body wall, and upper and lower extremity structures. Clinical correlates examine normal movement and pathological processes. Four hours of class and three hours of laboratory per week.	4 credits
BIO502L	Human Gross Anatomy Lab Human Gross Anatomy Lab	2 credits
BIO506	Principles of Neuroscience A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control of movement. Three hours of class per week. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • BIO502 Human Gross Anatomy • BIO502 Human Gross Anatomy 	3 credits

BIO506L	<p>Lab: Principles of Neuroscience</p> <p>Laboratory experience includes the human nervous system material, brain sections, and anatomical models. Two hours of Laboratory per week.</p> <p>Co-requisites</p> <ul style="list-style-type: none"> • BIO506 Principles of Neuroscience 	1 credits
PTH690	<p>Clinical Skills</p> <p>This course provides an introduction to physical therapy clinical skills with an emphasis on basic assessment and intervention procedures, along with surface anatomy palpation. Principles relating to these foundational techniques will be introduced via lecture and laboratory experiences. The techniques will be applied in future courses in increasingly complex patient/client problems and diagnoses.</p>	3 credits
PTH691	<p>Clinical Sciences</p> <p>An in-depth analysis of normal and abnormal human motion with an emphasis on biomechanics, gait, patterns of motion and mechanisms that affect or limit movement. Principles of the physical therapy diagnostic process, along with therapeutic techniques, procedures and modalities will be introduced.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 Human Gross Anatomy • BIO502L Human Gross Anatomy Lab • PTH690 Clinical Skills 	6 credits
PTH702	<p>Movement Science</p> <p>This course includes the study and application of theories of motor control, motor learning, and motor development that are utilized to guide examination of children and adults with neuromuscular dysfunction. Movement analysis is expanded along a continuum from infancy to older age, incorporating age-related movement changes and theories of aging.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 Human Gross Anatomy • BIO502 Human Gross Anatomy 	3 credits
PTH703I	<p>Musculoskeletal Physical Therapy Part One</p> <p>The first part of this two-part course will provide in-depth preparation required to perform the examination, evaluation, and management of musculoskeletal conditions commonly encountered in physical therapy practice. The course includes the physical therapy diagnostic process, including differential diagnosis and development of evidence-based physical therapy plans of care.</p>	2 credits

PTH703II	Musculoskeletal Physical Therapy- Part Two	10 credits
<p>The second part of this two-part course will provide in-depth preparation required to perform the examination, evaluation, and management of musculoskeletal conditions commonly encountered in physical therapy diagnostic process, including differential diagnosis and development of evidence-based physical therapy plans of care.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • PTH703I Musculoskeletal Physical Therapy Part One 		
PTH706	Clinical Physiology	5 credits
<p>This course provides in-depth study of normal human physiologic mechanisms with special application to exercise. Topics include: protein synthesis, cell communication, and energy metabolism; neuromusculoskeletal, cardiovascular, respiratory, digestive, renal, immune and endocrine systems; and exercise prescription, health promotion, and wellness. Students will participate in comprehensive fitness assessments during laboratory sessions.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • BIO502 Human Gross Anatomy • BIO502L Human Gross Anatomy Lab 		
PTH707	Cardiovascular and Pulmonary Physical Therapy	7 credits
<p>This course provides didactic, laboratory and problem-based learning experiences in the examination, evaluation and treatment of patients with primary and secondary cardiac, vascular and/or pulmonary dysfunction. Content ranges from the development of individualized, scientifically-based fitness/wellness programs to the management of patients across the lifespan with a wide spectrum of acute illnesses and/or chronic conditions.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • PTH703II Musculoskeletal Physical Therapy- Part Two 		
PTH708	Pediatric Physical Therapy	4 credits
<p>This problem-based course will provide in-depth information on the examination, evaluation, and management of pediatric neuro-musculoskeletal system dysfunction from birth through adolescence and young adulthood. Students will build upon concepts of normal development, motor control, and motor learning to develop a theoretical framework for addressing the physical therapy needs of children.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • PTH702 Foundations of Movement Science II • PTH707 Cardiovascular and Pulmonary Physical Therapy 		
PTH709	Neuromuscular Physical Therapy	9 credits
<p>This problem-based course explores the prevention, evaluation and management of neuromuscular system dysfunction throughout the adult life span. Students will build upon concepts from all previous courses to gain a comprehensive understanding of the multiple complex problems seen in patients with neurologic diagnoses.</p>		

Pre-requisites Complete all 2 of the following courses:

- PTH702 Foundations of Movement Science II
- PTH707 Cardiovascular and Pulmonary Physical Therapy

PTH713I	Multi-System Physical Therapy Part One The first part of this problem-based learning course emphasizes the physical therapy management of complex patients across the lifespan who present with pathology affecting multiple body systems. Students utilize advanced clinical decision-making skills to evaluate and prioritize interventions. Laboratory and problem-based learning experiences focus on educating and directing patients, families, and other providers is included.	1 credits
PTH713II	Multi-System Physical Therapy-Part Two The second part of this problem-based learning course continues with the physical therapy management of complex patients across the lifespan who present with pathology affecting multiple body systems. Students utilize advanced clinical decision-making skills to evaluate and prioritize interventions. Laboratory and problem-based learning experiences focus on educating and directing patients, families, and other providers is included. Pre-requisites Complete the following course: <ul style="list-style-type: none">• PTH713I Multi-System Physical Therapy Part One	2 credits
PTH722	Research I The purpose of this course is to offer students the opportunity to gain knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy.	3 credits
PTH724I	Research II Part One The purpose of this course is to offer students the opportunity to enhance their knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy. Pre-requisites Complete the following course: <ul style="list-style-type: none">• PTH722 Research I	1 credits
PTH724II	Research II-Part Two The purpose of part II of this course is to offer students the opportunity to enhance knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy.	1 credits
PTH730	Clinical Experience I-A The first part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal	4 credits

conditions.

PTH731I	Clinical Experience IB-I The first part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.	1 credits
PTH731I	Clinical Experience IB-I The first part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.	1 credits
PTH731II	Clinical Experience IB-II The second part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.	3 credits
PTH733	Clinical Experience II A ten (10) week full-time experience scheduled at the completion of study of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions. Satisfactory completion of all previous academic requirements is required.	7 credits
PTH735I	Clinical Experience V-Part One The first part of this sixteen (16) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.	1 credits
PTH735II	Clinical Experience V-Part Two The second part of this sixteen (16) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.	11 credits

PTH741	Principles of Practice I: Intro to PT Practice	3 credits
	<p>This course introduces the novice professional student to the roles of the physical therapist as: a professional; a communicator; and as a scholar. There is a heavy emphasis on patient-practitioner communication skills, especially during the patient interview. Fundamentals of evidence-based practice help students embrace the role of scholarly clinician.</p>	
PTH742I	Principles of Practice II: Communication and Ethics-Part One	1 credits
	<p>Part one of this course enhances basic concepts related to evidence-based practice, ethics and communication while introducing new concepts of health behavior and the current healthcare environment for application throughout the physical therapy curriculum.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PTH741 Principles of Practice I: Intro to PT Practice 	
PTH742II	Principles of Practice II: Communication and Ethics-Part Two	2 credits
	<p>Part two of this course enhances basic concepts related to evidence-based practice, ethics, and communication while introducing new concepts of health behavior and the current healthcare environment for application throughout the physical therapy curriculum.</p>	
PTH743	Principles of Practice III: Ethical Action and Social Responsibility	1 credits
	<p>This course is an integrated synthesis of material learned in previous Principles of Practice courses with practical application into clinical education. Students preliminarily explore the integration of social responsibility and professionalism via community-based learning.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PTH742II Principles of Practice II: Communication and Ethics-Part Two 	
PTH744	Principles of Practice IV: Service Learning	1 credits
	<p>This course is an integrated synthesis of material learned during previous POP courses. This course, guided by faculty and community service advisors, primarily evaluates the service learning project as it evolves over the past year. The evaluation will review the benefits of and obstacles to a meaningful learning experience. Students will discuss their contribution to the community agency and the population it serves, and will disseminate this to the Chatham physical therapy community through a group oral presentation.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • PTH743 P.P. III: Integration of Psychosocial Issues and Social Responsibility • PTH743 Principles of Practice III: Ethical Action and Social Responsibility 	

PTH745I	Principles of Practice V: Health Care, Management & Policy Part One Part one of this course integrates the principles of professional development with health care policy, delivery, and management.	1 credits
PTH745II	Principles of Practice V: Healthcare, Management & Policy- Part Two Principles of Practice V integrates the principles of health care delivery, management, policy and leadership within the physical therapy profession. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PTH744 Principles of Practice IV: Service Learning 	2 credits
PTH746I	Clinical Experience III-Part One The first part of this eight (8) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.	1 credits
PTH746II	Clinical Experience III-Part Two The second part of this eight (8) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.	5 credits
PTH747	Clinical Experience IV An eight-week, full-time experience in combination with PTH 746 Clinical Experience IV completed at the conclusion of didactic and laboratory course work. During this experience, the student will continue to develop competency in his or her entry-level professional physical therapy skills. An alternative to this course in combination with PTH 746 Clinical Experience IV is PTH 735 Clinical Experience III (16 weeks). Satisfactory completion of all previous academic requirements is required.	6 credits
PTH748	Research III: Evidence in Practice In this course, students integrate previous curricular topics related to evidence based practice. Students develop and complete a presentation of the systematic review completed in PTH 724. Students also complete a Knowledge-to-Action project aimed at increasing the use of research evidence in clinical practice. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • PTH724II Research II-Part Two 	2 credits

HSC633I Global Health Perspectives Part One**1 credits**

This course is intended to provide an opportunity for occupational therapy students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of the visiting country 2) illustrate the role or potential role of occupational therapy in contributing to the health and wellbeing of the population and 3) reflect on their personal growth and on the sustainability of their service.

HSC633II Global Health Perspectives Part Two**1 credits**

This course is intended to provide an opportunity for occupational therapy students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of the visiting country 2) illustrate the role or potential role of occupational therapy in contributing to the health and wellbeing of the population and 3) reflect on their personal growth and on the sustainability of their service.

2022-2023 Course Catalog

Doctor of Psychology (PsyD)

The PsyD program is accredited by the American Psychological Association (APA). The curriculum reflects APA's Standards of Accreditation by offering Discipline-Specific and Practice-Related coursework, practica experience, comprehensive exams, dissertation, and internship credits consistent with a doctorate degree in counseling psychology. Students take their courses in a developmental sequence to ensure that their training is appropriately sequential, cumulative, and congruent with their experience and goals. Given that there are three primary points of entry into the PsyD program, the course sequencing will look different for post-masters students with foundational coursework complete, post-master's students with incomplete foundational coursework, and post-bachelors student.

Post-masters students have accrued a master's degree in counseling, counseling psychology, clinical psychology, psychology or related field. Students with a master's degree should have foundational, graduate-level coursework in Helping Skills, Statistics/Research Methods, Multiculturalism & Diversity, Clinical Assessment, Counseling Theories, Vocational Counseling/Career Development, Human Development, Psychopathology, Evidence-Based Practice, Group Counseling, Family Therapy, and Professional Ethics. Post-masters students with the foundational coursework take 85 credits in the PsyD program. Post-masters students that do not have all of the foundational coursework completed when they start the PsyD program will be expected to complete the needed courses while in the program and as a result, will need to take more than 85 credits for the PsyD degree conferral. In addition, some students may opt to accrue additional training experiences either voluntarily or upon the recommendation of the faculty that would necessitate taking credits beyond the minimum 85 credits. As a result, for post-masters students, the PsyD degree credit requirement ranges from 85-91 credits.

Students entering the PsyD program after accruing their bachelor's degree in psychology or related field earn a Masters of Arts in Psychology (MAP) in route to their PsyD. The MAP covers 18 credits for the foundational coursework (Helping Skills, Statistics/Research Methods, Multiculturalism & Diversity, Psychopathology, Evidence-Based Practice, Group Counseling, Family Therapy, ,), 15 credits in relevant counseling psychology topics that are shared between the MAP and PsyD degree (Vocational Counseling/Career Development, Human Development, Assessment, Counseling Theories, and Ethics), an additional 3-credit elective, and 67 credits in the PsyD program, for a total of 103 post-bachelors credits for the PsyD degree conferral. As above, some students may opt to accrue additional training experiences either voluntarily or upon the recommendation of the faculty that would necessitate taking credits beyond the minimum 103 credits. As a result, for bachelor-entry students, the PsyD degree credit requirement ranges from 103-109 credits.

All students work with their academic advisor, Director of Training, Field Placement Coordinator, and other core faculty to map out and to implement an academic plan of study.

*Course sequencing may change to be in compliance with changing accreditation requirements. Students in the program will be notified promptly of any changes.

Admission Requirements

Admission Deadlines

Applicants who wish to be considered for Fall 2020 entry should have all application materials submitted by **December 1, 2019**. Applicants will be notified by mid-January regarding selection to participate in full-day program interviews, which will take place in February.

Pre-requisites

- A baccalaureate or masters degree from an accredited college or university
- Master's degree in counseling, psychology, or related field (36 credit hours minimum); with a 3.2 minimum graduate GPA
- **Or** an undergraduate degree with a minimum of 15 undergraduate psychology credit hours; with a 3.5 minimum undergraduate GPA (with Bs or above in psychology coursework)

Application Requirement

Applicants to the PsyD program must submit the following information to the Office of Admissions for review:

- Completed [online](#) application
- Official Transcripts (must be sent from the school's Registrar's Office) from **all** colleges and universities you have attended including those in which you may **have transfer credits**
- Curriculum vitae or resume
- Three (3) Academic or Professional Letters of Recommendation
- Official GRE test scores (General test only) – Chatham Code 2081
- Admissions essay - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?

Admission Process

After verifying that the minimum academic requirements are met, the program utilizes a holistic approach in reviewing the candidate's entire application. This process is intended to seek talented and qualified individuals of all backgrounds. Taking multiple factors into consideration during our admissions process positively achieves the educational benefits of a student body that is both diverse and academically excellent. This approach includes an evaluation of each candidate's academic achievement as well as their personal characteristics, attributes and experiences. As part of the holistic review, **Chatham reserves the right to request a background check prior to offer of admission.**

Applicants will be informed by the Office of Admissions about whether or not they have been accepted into the PsyD program.

International Applicants

International Applicants to the Doctor of Psychology program must submit additional documentation to the Office of Admissions.

A list of these documents can be found on the [International Admission](#) web pages.

Learning Outcomes

Chatham University's Psy.D. in Counseling Psychology program is committed to **developing entry level health service psychologists who are capable of practicing ethically and capably within the bounds of their competence.**

Professional Competencies

In line with the profession-wide competencies set forth by the American Psychological Association's Standards of Accreditation for Health Service Psychologists, we seek to develop the professional competencies of our students in the following areas:

1. Competency 1: Research

Students will demonstrate the ability to:

- Independently formulate research and/or other scholarly activities (such as critical literature reviews, program development/evaluation, clinical case studies, efficacy studies, theoretical papers, dissertation research).
- Conduct research and/or other scholarly activities.
- Critically evaluate and disseminate research and/or other scholarly work.

2. Competency 2: Ethical and Legal Standards

Students will demonstrate the ability to:

- Understand and act in accordance with APA Ethical Principles of Psychologists and Code of Conduct, relevant laws governing health service psychologists, and relevant professional standards and guidelines.
- Recognize ethical dilemmas as they arise, and apply ethical decision-making processes in order to resolve dilemmas.
- Conduct oneself in an ethical manner in all professional activities.

3. Competency 3: Individual and Cultural Diversity

Students will demonstrate:

- Understanding of how their own personal/cultural history, attitudes, and biases may affect how they understand and interact with people different from themselves.
- Knowledge of the current theoretical and empirical knowledge base as it relates to addressing diversity in all professional activities including research, training, supervision/consultation, and service.
- The ability to integrate awareness and knowledge of individual and cultural differences in the conduct of professional roles (e.g., research, services, and other professional activities). This includes the ability apply a framework for working effectively with areas of individual and cultural diversity not previously encountered over the course of their careers. Also included is the ability to work effectively with individuals whose group membership, demographic characteristics, or worldviews create conflict with their own.
- The requisite knowledge base, ability to articulate an approach to working effectively with diverse individuals and groups, and apply this approach effectively in their professional work.

4. Competency 4: Professional Values, Attitudes and Behaviors

Students will demonstrate the ability to:

- Behave in ways that reflect the values and attitudes of psychology, including integrity, deportment, professional identity, accountability, lifelong learning, and concern for the welfare of others.
- Engage in self-reflection regarding one's personal and professional functioning; engage in activities to maintain and improve performance, well-being, and professional effectiveness.
- Actively seek and demonstrate openness and responsiveness to feedback and supervision.
- Respond professionally in increasingly complex situations with a greater degree of independence as they progress across levels of training.

5. Competency 5: Communication and Interpersonal Skills

Students will demonstrate the ability to:

- Develop and maintain effective relationships with a wide range of individuals, including colleagues, communities, organizations, supervisors, supervisees, and those receiving professional services.
- Produce and comprehend oral, nonverbal, and written communications that are informative and well-integrated; demonstrate a thorough grasp professional language and concepts.
- Demonstrate effective interpersonal skills and the ability to manage difficult communication well.

6. Competency 6: Assessment

Students will demonstrate the ability to:

- Demonstrate current knowledge of functional and dysfunctional behaviors, including consideration of client strengths and psychopathology.
- Apply the knowledge of client strengths and psychopathology to the assessment process with sensitivity to cultural and individual differences.
- Select and apply assessment methods that draw from the best available empirical literature and that reflect the science of measurement and psychometrics; collect relevant data using multiple sources and methods appropriate to the identified goals and questions of the assessment as well as relevant diversity characteristics of the service recipient.
- Interpret assessment results, following current research and professional standards and guidelines, to inform case conceptualization, classification, and recommendations, while guarding against decision-making biases, distinguishing the aspects of assessment that are subjective from those that are objective.
- Communicate orally and in written documents the findings and implications of the assessment in an accurate and effective manner sensitive to a range of audiences.

7. Competency 7: Intervention

Students will demonstrate the ability to:

- Establish and maintain effective relationships with the recipients of psychological services.
- Develop evidence-based intervention plans specific to the service delivery goals.
- Implement interventions informed by the current scientific literature, assessment findings, diversity characteristics, and contextual variables.
- Apply the relevant research literature to clinical decision making.
- Modify and adapt evidence-based approaches effectively when a clear evidence-base is lacking.
- Evaluate intervention effectiveness, and adapt intervention goals and methods consistent with ongoing evaluation.

8. Competency 8: Supervision

Students will demonstrate:

- Knowledge of supervision models and practices.

9. Competency 9: Consultation & Interprofessional/Interdisciplinary Skills

Students will demonstrate:

- Knowledge and respect for the roles and perspectives of other professions.
- Knowledge of consultation models and practices.

Curriculum

Foundational Courses

These courses are required for students entering the PsyD program without a master's degree. Students with a master's degree may need to take some or all of these courses depending on their previous graduate-level coursework.

PSY501	Foundations of Counseling Psychology The course introduces students to the field of counseling psychology, including the historical roots, current values, and training curriculum. The course also engages students in experiential learning of the theory and practice of basic counseling skills.	3 credits
PSY555	Statistics and Research Methods The course provides a basic review of descriptive and inferential statistics and how these techniques are used with research methods in counseling psychology. Students will become proficient in computer analysis of data sets, designing and evaluating research designs and techniques, and understanding primary research in counseling literature.	3 credits
PSY617	Psychology of Culture and Identity The course addresses issues of culture and identity, as related to counseling and therapeutic relationships. Sociopolitical, socioeconomic, familial, and psychological aspects of diversity, identity, and culture are explored through readings, seminars, and experiential exercises. Students challenge underlying assumptions and develop effective skills to work with diverse populations.	3 credits
PSY642	Assessment The course covers the basics of psychological assessment. The importance of integrating information from various sources when formulating hypotheses and diagnostic impressions and when developing treatment plans is emphasized. Other topics include interviewing, mental status examinations, psycho-physiological strategies, psychological tests related to various diagnostic groupings, and program evaluation.	3 credits
PSY662	Theories and Techniques of Counseling This course explored a variety of counseling theories and techniques to provide a foundation for the practice of professional counseling from a culturally sensitive perspective. The course emphasizes current professional research and practice related to counseling theories and techniques, and provides opportunities for skill practice.	3 credits

PSY681	Professional Integration Seminar	3 credits
<p>The course explores ethical conceptualization, analysis, and practices of applied and counseling psychologists. Topics include the ethical standards of the American Psychological Association and the American Counseling Association, the history of applied psychology, and the developing mental health counseling movement. Certification, licensure, and regulatory practices are also discussed.</p>		

Additional MAP to PsyD Coursework

These courses are required for students earning a MAP in route to the PsyD.

PSY657	Psychopathology & Resilience	3 credits
<p>The course provides an overview of psychopathology. Students learn to recognize the complex biological, cultural, and environmental contributors to mental illness, and to diagnose mental disorders using standardized criteria. Students will also study the concept of resilience and its role in contributing to health and well-being.</p>		

PSY629	Human Development across the Life Span	3 credits
<p>The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.</p>		

PSY658	Evidence-Based Practice	3 credits
<p>This course provides an introduction to evidence-based practice in applied psychology, emphasizing a counseling psychology perspective to understanding human problems. The course focuses on the methodological issues in developing an empirical basis for psychological treatments, and understanding the evidence base for treatment, therapist, client, and therapeutic relationship effects.</p>		

PSY672	Group Counseling	3 credits
<p>The course explores the theory and practice of group experience from the perspectives of a member and observer. Topics include basic elements of group dynamics, interpersonal styles as they affect or hinder group functioning, role identity, leadership style, and application of group skills in organizations.</p>		

PSY627	Vocational/Career Counseling	3 credits
<p>The course addresses the issues involved in the lifelong process of vocational development, through exploration of theories and assessment approaches in career counseling. Additional topics addressed include self-awareness, career awareness and assessment, career decision making and planning, and career implementation.</p>		

Required Discipline Specific and Practice-Related PsyD Courses

PSY674	Foundations of Family Therapy <p>The course focuses on the evaluation and treatment of psychological symptoms from the perspective of the family and systems theory. The history and evolution of the family movement will be presented and multiple family therapy modalities introduced, with an emphasis on selected theories and applications.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none">• PSY501 Foundations of Counseling Psychology• PSY662 Theories and Techniques of Counseling	3 credits
PSY706	History of Psychology <p>This course focuses on contemporary perspectives and historical and philosophical foundations of counseling psychology. The course emphasizes modern theories and practices of counseling psychology as a social science and profession, particularly as related to sustainable health and well-being for individuals, families, and communities.</p>	3 credits
PSY707	Social Psychology <p>This course provides an overview of historical and current trends in social psychology. Major theories and research findings relating to group dynamics, attitude change, prejudice, and others are presented. Contemporary critiques of the field and the relevance of social psychology to social change and the helping professions are discussed.</p>	3 credits
PSY708	Cognitive & Affective Bases of Behavior <p>The course addresses empirically supported theories of Cognition and Affect and their influence on human behavior. Cognitive understanding of how humans learn, process and retain information and its role in human activities will be examined. Affect will be examined through review of early attachment relationships, emotional regulation, and social-emotional processes.</p>	3 credits
PSY709	Intellectual Assessment <p>The course prepares students to administer tests of cognitive functions. Students will examine theory and clinical assessment of cognitive functioning including basic psychometric principles. Practical experiences are offered in test administration, scoring, interpretation, and professional report writing.</p>	3 credits
PSY711	Multicultural & Diversity Issues in Counseling Psych <p>The course provides an in-depth exploration of cultural differences as they impact the counseling relationship. Identity development theory will be examined, as will multicultural research methods and findings. Finally, the significance of both between-group and within-group differences will be explored for their relative influence on the process of therapeutic change.</p>	3 credits

PSY712	Advanced Research Design	4 credits
	This course reviews essential concepts in research design and statistics, with an emphasis on ensuring that students are capable of critically evaluating research studies and drawing reasonable conclusions from those studies. Students will have a strong foundation in research design and proficiency in statistics after having completed this course.	
PSY714	Personality Theory and Assessment	3 credits
	The course covers theories of personality and prepares students to administer, score, interpret, and write reports about commonly used instruments for the assessment of personality. Approaches and instruments included will be interviewing techniques, personality inventories, projective tests.	
PSY715	Ethical Issues in Counseling Psychology	3 credits
	This course will focus on providing students with the knowledge, skills, and experiences necessary to perform ethical practice with clients across the full dimension of human experience, using the APA Ethics Guidelines as a foundation.	
PSY716	Psychometrics	2 credits
	The course offers theories and techniques related to the design, administration, and interpretation of quantitative tests measuring psychological variables such as intelligence, aptitude, and personality traits. It does not involve actual test design, administration and interpretation, but does explore theories and techniques related to these activities.	
PSY780	Professional Seminar in Counseling Psychology	3 credits
	This seminar explores the history of counseling psychology, professional identity, professional organizations, diverse populations, research and publishing, training issues, and professional ethics. Students will explore the scientific foundations of the counseling psychology profession and application of that foundational knowledge in counseling interviews.	
PSY806	Supervision and Leadership	3 credits
	This course introduces students to theories, research, roles and activities of supervision, consultation, and leadership in counseling psychology. The course is both didactic and experiential. For all activities, issues of diversity, ethics, and professional practice will be discussed.	
PSY605	Biopsychology	3 credits
	This course focuses on the development of the brain and nervous system, interconnections between the human body's biological systems, and types and mechanisms of psychopharmacological interventions for psychological disorders.	

PSY810 Advanced Data Analysis **4 credits**

This course introduces advanced concepts in data analysis, with an emphasis on ensuring that students are capable of designing research studies and selecting and implementing appropriate methods of data analysis. Students will work on their dissertation proposals in this

PSY815 Organizations, Communities, and Consultation **3 credits**

This course will address theories and research related to functioning of organizations and communities. The counseling psychologist as consultant will be discussed, along with major principles and strategies for conducting system level assessments, and planning, implementation and evaluation of consultative interventions.

PSY816 Health Psychology Practice **3 credits**

The course focuses on the interface between psychology and medicine, preparing students to use psychology interventions in the treatment and management of illness and to understand the role of psychologist in the interdisciplinary healthcare team. Theory, research, and practice of health psychology will be presented.

Coursework Credits = 49

Additional Degree Requirements

Practicum

PSY746 Practicum I **3 credits**

This course is a field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 300 hours on site in addition to participating in the weekly group supervision class.
Additional fee(s): Clinical fee.

Note: Field placements completed at the Masters level cannot be used to meet the requirement for doctoral field placement.

Practicum Credits Total = 12

Dissertation

Required Dissertation = 6 Credits

Required Internship = 3 Credits

Total Credits = 103

Elective Courses

Students that have entered the program with a master's degree that has fulfilled all foundational and related coursework (PSY627,629,657,658,672) are eligible to accrue up to 5 electives (15 credits) as part of their PsyD degree.

PSY530	Introduction to Sport and Exercise Psychology This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.	3 credits
PSY602	Sport and Exercise Psychology Interventions Students in this course will become competent in the understanding and application of the core mental skills of sport and exercise psychology across settings and across the lifespan. Pre-requisites Complete the following course: <ul style="list-style-type: none">• PSY530 Introduction to Sport and Exercise Psychology	3 credits
PSY621	Advanced Seminar in Diversity Issues The course further develops the multicultural competency of counselors in relation to specific selected topics related to diversity and counseling. This is an elective course.	3 credits
PSY632	Positive Psychology Positive Psychology is the study of how humans do well and flourish. This course is an introduction to positive psychology theories and techniques. Didactic, experiential, and interactive elements will be used to explore concepts, research, interventions, and exercises that positive psychology has contributed to the larger field of psychology.	3 credits
PSY662	Theories and Techniques of Counseling This course explored a variety of counseling theories and techniques to provide a foundation for the practice of professional counseling from a culturally sensitive perspective. The course emphasizes current professional research and practice related to counseling theories and techniques, and provides opportunities for skill practice.	3 credits
PSY665	Addictions Counseling The course addresses a variety of addiction topics, including chemical dependency, eating disorders, sexual addiction, the chemically dependent offender, and women's issues in addiction. Several treatment models are explored, with emphases on effectiveness of treatment approaches and on multicultural sensitivity.	3 credits

PSY668	Crisis, Trauma and Recovery The course is an introduction to the field of psychological trauma, examining the historical development of trauma as a clinical entity and an overview of theories and strategies for treating trauma. Students will learn to identify and work with their own reactions to clients who present trauma issues.	3 credits
PSY671	Mindfulness Counseling This course explores mindfulness and acceptance based approaches to counseling and discusses the integration of art and science when utilizing these approaches. Students will examine current research about efficacy of such approaches, and also develop beginning skills in these approaches.	3 credits
PSY673	Couples Counseling This advanced course covers selected theories and techniques related to couples counseling. The emphasis in the course is on practical application of the theories. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • PSY501 Foundations of Counseling Psychology • PSY662 Theories and Techniques of Counseling 	3 credits
PSY676	Counseling Children and Adolescents The course focuses on issues and concepts related to counseling children and adolescents with social and/or emotional problems. Topics include significant differences between children/adolescents and adults; theories of normal child development and temperament; and conceptualization and effective treatment of problems.	3 credits
PSY677	Grief Counseling The course introduces students to the techniques, strategies, and treatment modalities counselors use to work with adults, children, and families dealing with bereavement. The class focuses on psychological, somatic, cultural, and spiritual aspects of grief and loss. Other topics included are interventions, community resources, and diverse religious and cultural practices.	3 credits
PSY678	Risk and Resilience in Childhood The course covers child/adolescent psychopathology and psychological assessment of children and adolescents. Specific topics include diagnostic and assessment issues specific to children and adolescents; psychological and developmental disorders specific to children and adolescents; and related social and cultural issues.	3 credits
PSY693	Independent Study Independent Study Pre-requisites Complete the following course: <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	3 credits

2022-2023 Course Catalog

Entry-Level Doctor of Occupational Therapy (OTD)

The vision of the Entry Level Doctor of Occupational Therapy Program at Chatham University is to cultivate personal and professional growth as globally-minded citizens and as leaders in healthcare. At its core, the program promotes sustainable health and wellness for all persons, communities and populations.

The mission of the Chatham University Entry Level Doctor of Occupational Therapy Program is to prepare students to be reflective, skilled, ethical occupational therapy practitioners and future leaders by facilitating:

- a. the ability to think and reflect critically about local, national, and global issues impacting occupational therapy practice and make professional judgments which consider and integrate the complex and multifaceted nature of clients' occupational performance.
- b. the knowledge, skills, and attitudes necessary for current and future practice of the profession, in order to enhance and/or sustain the quality of human life.
- c. an awareness of the responsibility associated with the moral, ethical, and legal obligations inherent in the role of an occupational therapist.
- d. an awareness of and sensitivity to diversity through the use of a client centered approach, and a recognition of the role of occupation in maximizing participation, health, and human potential.
- e. sustainable professional growth congruent with attributes of personal integrity and authenticity through life-long learning via engagement in community focused service, professional leadership, and ongoing scholarly pursuits.

The Entry-level OTD program curriculum design is based upon self-directed, active, experiential, and didactic learning strategies. The curriculum focuses on the development of critical thinking/professional reasoning skills, occupational therapy knowledge and evidence-based practice skills, and professional growth and leadership. Students must complete fieldwork training and a doctoral capstone project as part of the degree requirement. Students must also complete all degree requirements no later than six years after the date of first enrollment in the program. A student may petition the Graduate Programs Committee, through the occupational therapy program director, for an extension for a limited period if such extension is sought before the five-year limit expires.

All occupational therapy courses are limited to occupational therapy students unless permission is obtained from the instructor and the program director.

Admission Requirements

How to Apply

Applicants to Chatham University's entry-level occupational therapy program must use the Occupational Therapist Centralized Application Service (OTCAS). Beginning mid-July, applications may be submitted through [OTCAS](#) with all admission requirements noted below. Please note the GRE is not required, and there is no supplemental application.

Important Dates For Fall 2023 Admission

Priority Application Deadline: OTCAS Submitted by October 1, 2022

Priority Virtual Interview Date: November 19, 2022

Application Deadline for February Interview: OTCAS Submitted by January 15, 2023

February Interview Date: February 11, 2023*

Chatham's OTCAS Application Closes June 10, 2023. All interviews after February will be on a rolling space available basis.

All interviews are by invitation only.

In order to be eligible for invite to the admission interview, applicants must have 3 of the 5 prerequisite courses completed by August 31, and at least one of those courses must be human anatomy with lab or physiology (animal or human) with lab or anatomy & physiology I with lab.

***It is highly recommended to e-submit your application to OTCAS on or before January 15.** OTCAS's verification process occurs once an applicant e-submits the application and all official transcripts have been received. Verification involves some processing time, so it is in your best interest to submit all materials as early as possible to ensure your complete, verified application is available for us to review.

Admission Requirements

- A completed baccalaureate degree from an accredited institution or completion of undergraduate requirements for the Integrated Degree Program (IDP) prior to the beginning of classes.
- Official transcripts from all institutions attended sent directly to OTCAS.
- Overall combined GPA of 3.0 or better on a scale of 4.0 as calculated by OTCAS.
- Prerequisite GPA of 3.0 or better on a 4.0 scale. Additionally, grades less than a "C" are not acceptable, and prerequisite courses must have been completed no more than ten years prior to the anticipated start date of the program.

A "Pass" or "Satisfactory" grade for prerequisites will be accepted for coursework completed during the Spring 2020 semester. However, such grades do not impact GPA calculation.

- At least three of five prerequisite courses completed by August 31st of the application year, and at least one of those courses must be human anatomy with lab or physiology with lab or anatomy & physiology I with lab.

Prerequisite courses:

- Human Anatomy with lab - one term**
- Physiology (human or animal) with lab - one term**
 - **If taking anatomy with physiology, both Anatomy & Physiology I and II with labs are necessary to fulfill the anatomy and physiology requirements.
- Abnormal Psychology – one term
- Statistics or Research Methods – one term
- Developmental Psychology or Lifespan Development – one term
 - A combination of developmental psychology courses that cover the lifespan—birth to death—are also acceptable
- *Optional Neuroscience - one term*

- Neuroscience is not required; therefore, students who have not taken this course will not be disadvantaged during the admission review process. Exposure to this course content is helpful for matriculated students.
- Two professional letters of reference included in the OTCAS application. Acceptable letters of reference may include those from academic faculty or advisors, from occupational therapists involved in shadowing or work experience, or from supervisors or staff members from volunteer or work experience.
- Attendance at virtual interview.

ADDITIONAL ADMISSION INFORMATION

Advanced placement, transfer of credit, or credit for experiential learning is not available to students in the entry-level OT Program for occupational therapy courses due to the integrated and sequential nature of the coursework in this program.

INTEGRATED DEGREE PROGRAM

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisors to ensure all requirements are met according to the IDP course of study.

ADMISSION REVIEW PROCESS

After verifying that the minimum academic requirements are met, the occupational therapy program faculty reviews each candidate's entire application and invites the most talented and qualified students to interview before program faculty and alumni.

As part of the admission review, Chatham reserves the right to request a background check prior to the offer of admission. The occupational therapy program strives for diversity and gender equity within each class.

ARTICULATION AGREEMENTS

Chatham University has entered into "Articulation Agreements" with a select group of Colleges and Universities. These agreements provide for additional student pre-professional advisement and possible priority admission status for candidates with exceptional applications, demonstrating academic preparation above the minimal acceptable standards.

Agreements exist with the following institutions for the 2022-2023 academic year: Allegheny College, Baldwin Wallace University, Grove City College, Penn State Mont Alto, Washington and Jefferson College, and Waynesburg University.

Applicants from these institutions are advised to discuss the articulation requirements with their

advisor as well as the graduate admission counselor at Chatham University.

If you have any questions, please do not hesitate to contact our Admission Department:

Office of Admission

Chatham University
Woodland Road
Pittsburgh, PA 15232
(800) 837-1290
(412) 365-1394
[Email Admissions](#)

INTERNATIONAL APPLICANTS

International Applicants must submit additional documentation to the Office of Admissions. A list of these documents can be found on the International Admission web page.

ADMITTED STUDENT PROFILE

For students beginning Fall 2022:

Number Enrolled:	38
Average Overall GPA:	3.49
Average Prerequisite GPA:	3.48
Average Age:	24
Out-of-State Residents:	47%

For students beginning Fall 2021:

Number Enrolled:	40
Average Overall GPA:	3.54
Average Prerequisite GPA:	3.68
Average Age:	24
Out-of-State Residents:	37%

For students beginning Fall 2020:

Number Enrolled:	39
Average Overall GPA:	3.57
Average Prerequisite GPA:	3.6
Average Age:	23

Learning Outcomes

Program Goals and Student Learning Outcomes

The curriculum design consists of three threads and three levels. The learning experiences are designed to enable the graduate to demonstrate the three major program outcomes at a level consistent with candidacy for entry-level practice:

Outcome #1: Professional Reasoning

Professional Reasoning is defined as “the process that practitioners use to plan, direct, perform, and reflect on client care” (Schell, 2014). Professional reasoning begins with critical thinking which includes the process of evaluating and judging the accuracy of information through questioning and probing of ideas in order to make informed conclusions (Ruggiero, 2014).

Beginning Level: The student will:

- understand the dimensions of the professional reasoning process across the domains of occupational therapy.
- understand the importance and the impact of context and environment (cultural, personal, temporal, physical, virtual, and social) on occupational engagement.
- identify client centered occupational performance problems and ask appropriate questions.
- describe the value and relevance of evidence-based practice in the OT process.

Intermediate Level: The student will:

- analyze and generate possible solutions in response to client centered occupational performance problems.
- synthesize new concepts with previously learned information to make decisions regarding evaluation and intervention.
- begin to use evidence to support and guide decision making.

Entry Level: The student/graduate will:

- recognize the role of experience and ongoing self-directed learning in professional reasoning.
- incorporate evidence-based practice skills in the OT process.
- examine and analyze the dynamic relationship between the person, environment and occupation in order to prioritize and/or modify appropriate courses of action that effect change in the person, community and/or society

Outcome #2: Occupational Therapy Knowledge and Skills

Occupational Therapy Knowledge and Skills is defined as a dynamic understanding of the theoretical tenets, the domain and process of occupational therapy (AOTA, 2014), and the competent application of that knowledge to OT practice.

Beginning Level: The student will:

- articulate the basic tenets and foundational history of the profession, including the power of occupation to support health and participation, the concept of client centeredness as a core principle of the profession.
- understand and use structured interviews, directed observations, and standardized/non-standardized assessment tools, and discuss and document results using professional terminology.
- identify and describe the domain and process of occupational therapy.
- define the importance of therapeutic use of self in the occupational therapy process.

Intermediate Level: The student will:

- select and administer appropriate evaluation methods/tools, including scoring, interpreting and documenting results.
- formulate and implement a client centered intervention plan, guided by the occupational profile, conceptual models of practice, and the best available evidence.
- demonstrate appropriate therapeutic use of self in a variety of contexts.

Entry Level: The student/graduate will:

- modify therapeutic use of self in response to the needs of clients
- adapt evaluation, intervention, and service delivery methods to meet the dynamic needs of persons, groups, and populations.
- apply knowledge and strategies related to the management of occupational therapy services, including program development, marketing, and program evaluation.
- demonstrate the ability to navigate and influence health care policy, occupational therapy practice, and/or societal needs.

Outcome # 3: Professional Growth and Leadership

Professional Growth and Leadership encompasses a myriad of experiences that promote sustainable professional growth including leadership, enculturation into the profession, ongoing self-assessment, and engagement in continuing education and scholarly endeavors.

Beginning Level: The student will:

- identify and articulate an understanding of behaviors that are consistent with the AOTA Code of Ethics, national, regional and local governing bodies and their implications for practice.
- understand the role and importance of professional organizations associated with occupational therapy practice.
- identify and demonstrate behaviors consistent with the role of a professional, including verbal and nonverbal communication, leadership, and active engagement in the learning process.

Intermediate Level: The student will:

- demonstrate behaviors that are consistent with ethical and legal practice guidelines.
- identify and use resources and opportunities for professional and scholarly development.
- reflect upon one's own professional development and identify areas of strength, areas for

improvement, and goals for professional growth.

Entry Level: The student/graduate will:

- generate options for reconciling ethical and/or legal issues and articulate an understanding of the issues relevant to all parties.
- modify professional presentation and level of content to meet the needs of the person, group, and/or organization.
- integrate leadership skills and personal strengths congruent with professional authenticity and integrity in order to serve in multifaceted occupational therapy roles.
- develop a plan for continued scholarly and professional activities.
- engage in professional, advocacy, and scholarly endeavors.

Curriculum

Degree Requirements

117 credits, including:

BIO503	Human Anatomy This course provides a basic understanding of human anatomy, with an emphasis on the osteology and muscles of the upper and lower limbs, including the back. It uses a combination of systems-based and region-specific instruction. Lectures are complimented by laboratory exercises based upon the A.D.A.M. computer program. Three hours of class and two hours of laboratory per week.	3 credits
BIO503L	Laboratory: Human Anatomy Laboratory: Human Anatomy	1 credits
BIO509	Fundamentals of Neuroscience This course is designed to examine the fundamental aspects of nervous system function, emphasizing the bases of excitability, synaptic transmission and neuron target interactions. BIO509 introduces students to the basics of integrative neural function, including sensory, motor, learning, memory, and limbic systems. Three hours of lecture per week.	3 credits
BIO509L	Fundamentals of Neuroscience Lab Laboratory exercises to compliment lectures in BIO509, including study of human nervous system material, brain sections, and anatomical models. Two hours of Laboratory per week.	1 credits

OTH601	Foundations of Occupation & Occupational Therapy Students explore the role of occupation as the foundation of the profession and the relationship between occupation and health. Standards of practice, OT roles, history, current practice, and future trends are discussed. Methods of evaluation and documentation are introduced and practiced. Occupations throughout the lifespan and implications for intervention are examined.	3 credits
OTH603	Intro to OT Assessment & Intervention Skills Students learn to identify and assess the influence of client factors, performance skills and patterns, activity demands, and context on occupational performance from a physical disabilities perspective. Experiential learning opportunities enable students to gain proficiency in administering and interpreting assessments and practicing intervention strategies related to multiple areas of occupation.	4 credits
OTH605	Mental Health & Occupational Performance Students learn and apply the occupational therapy process for clients with mental health disorders. Occupational performance assessment, and intervention planning and implementation are emphasized. Societal and personal attitudes towards persons with mental health disorders will be explored. The social, economic, political, and demographic factors influencing mental health service provision will be addressed.	4 credits
OTH612	Evidence-based Practice I This course introduces the role of evidence in occupational therapy clinical reasoning and practice. Students develop research consumer skills, including database search techniques, and critical analysis skills. Students are instructed within lecture and lab formats and with written and oral assignments that develop understanding of evidence based practice.	2 credits
OTH622	Occupational Performance in Children & Adolescents Students explore occupational development of children and adolescents, and the interrelationship between the child, occupation, and the environment on participation. Students learn about common pediatric diagnoses, practice models, and intervention sites, and apply this knowledge to occupational therapy evaluation and intervention. Influence of the family, environment, and socio-cultural factors is explored.	4 credits
OTH623	Occupational Performance in the Aging Population This course examines the normal aging process with emphasis on occupational performance, activity limitation, and participation restrictions of individuals from adulthood through the life span. Students review the assessment and treatment of clients, including prevention, remediation, and maintenance of wellness. Various practice areas for the adult and aging populations are discussed.	4 credits

OTH624	Biomechanics & Occupational Performance Students integrate knowledge of occupational performance with anatomy, neurology, and body factors to learn how impairments can lead to disability or role loss. Assessments and interventions are taught with a holistic approach to the person. Instruction is in both lecture and lab formats, and with written and oral assignments.	4 credits
OTH626	Occupational Therapy Models of Practice Theoretical practice models that guide occupational therapy evaluation and intervention are introduced and explored. Engagement in active learning opportunities enables students to describe and implement the occupation therapy process using selected models. Students analyze and relate pertinent occupations therapy literature and case studies to models of practice.	2 credits
OTH628	Evidence-Based Practice II This course develops and applies the students' evidence based practice skills. Emphasis is placed on writing focused clinical questions, systematic database searches and critical appraisals of research papers. Students work in small groups with a faculty advisor and individually to analyze and articulate evidence through written and oral assignments.	3 credits
OTH632	Environmental Interventions Students learn principles of assistive technology practice and the occupational therapist's role on the assistive technology team. Students explore and critique technology resources, assess environments, and apply information to evaluation and treatment. The impact of environmental interventions on the consumer's ability to engage in meaningful occupations is discussed and analyzed.	3 credits
OTH635	Pediatric Fieldwork I-A & Seminar This course provides students the opportunity to observe and engage with practitioners who provide occupational therapy services to infants, children and/or adolescents. This course uses guided assignments and small group discussions to bridge didactic classroom knowledge with the occupational therapy process and practices observed in pediatric settings.	1 credits
OTH636	Adult Fieldwork I-B & Seminar This course provides students the opportunity to observe and engage with practitioners who provide occupational therapy services in adult/geriatric settings. Guided assignments and small group discussions are used to bridge didactic classroom knowledge with the occupational therapy process and practices observed in adult/geriatric settings.	1 credits

OTH637	Functional Neuroscience	4 credits
	This course applies content presented concurrently in BIO509 to the occupational therapy process. Students broaden their understanding of neurological disorders that may affect an individual's ability to perform routine occupational tasks. Students begin to translate the physiological changes incurred secondary to these neurological diagnoses to develop assessment and intervention plans.	
OTH641	Neurological Conditions & Occupational Performance	4 credits
	This course emphasizes preparatory, purposeful, and occupation-based interventions as well as exploration of current innovations commonly used in occupational therapy practice. Students learn, apply, practice, compare and contrast evaluative and intervention methods for dysfunction related to neurological conditions. Students practice hands-on techniques, analyze cases, and superimpose purposeful and occupation-based treatment after incorporating various neuro-physiologically based techniques.	
OTH643	Evidence-Based Practice III	2 credits
	This course further develops evidence based practice skills by synthesizing the evidence analyzed in OTH 628 to prepare for writing a critical appraisal of topic. Students continue to work in small groups with a faculty advisor and produce a large format poster to report their findings via a poster presentation.	
OTH644	Community Based Fieldwork I-C & Seminar	2 credits
	This community-based fieldwork experience emphasizes higher level management and leadership skills, including program development, advocacy and consultation. Students learn about community agencies, population and organizational needs, and the role of occupational therapy practitioners in community based settings. Students complete an organizational analysis, needs assessment, and a program plan which is implemented and evaluated.	
OTH645	Professional Leadership & Management	3 credits
	Students explore the meaning of professional leadership/service through self-assessment and engagement in a variety of projects throughout the course. Managerial roles, including communicating, marketing, budgeting, planning and evaluating programs are discussed within the broader context of an evolving health care system. Ethical issues related to occupational therapy are explored and analyzed.	
OTH646	Evidence-based Practice IV	3 credits
	In this course, students prepare a critical appraisal of topic using evidence gathered and analyzed in OTH612, OTH628, and OTH643. Students develop a scholarly agenda and learn how to collect and analyze data in preparation for entry level based practice. Objectives are achieved through written and oral assignments.	

OTH660	Fieldwork II Seminar	1 credits
	<p>This course provides students with resources and skills that will facilitate their success during Level II fieldwork. In addition, job search skills, resume writing, and interviewing techniques are integrated. Students become familiar with fieldwork II evaluation methods as well as the application requirements and processes for the certification examination and state licensure.</p>	
OTH662	Fieldwork Level II-A	12 credits
	<p>This 12-week, full time experience takes place in practice settings that provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.</p>	
OTH665	Fieldwork Level II-B	12 credits
	<p>This 12-week, full time experience takes place in practice settings that provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.</p>	
<hr/> <p>OTH707 - Introduction to Doctoral Capstone (2)</p>		
<hr/> <p>OTH738 - Doctoral Capstone Project Development I (2)</p>		
<hr/> <p>OTH748 - Doctoral Capstone Project Development II (3)</p>		
<hr/> <p>OTH767 - Integrated Occupational Science (3)</p>		
<hr/> <p>OTH790 - Doctoral Experience (12)</p>		
<hr/> <p>OTH795 - Doctoral Dissemination (3)</p>		

2022-2023 Course Catalog

Master of Arts in Communication

The Master's program in Communication is a professional degree program designed to relate theory and practice. While this is a professional program, the foundations in research and theory offered also equip graduates to pursue doctoral studies in the Communication-related field. This accelerated 30 credit Master's is a hybrid program, blending on-ground courses with select online offerings for increased flexibility. A required core of classes provides foundations in communication research, theory, and ethics.

Students may select one of three tracks to pursue a specialization in: Health Communication, Environmental Communication, or Strategic Communication. These unique tracks provide depth in defined content areas to cultivate expertise and provide necessary skills and knowledge relevant to the specialization.

Curriculum and Courses:

The Masters of Arts in Communication program consists of a core of five courses (15 credits), one specific concentration, and six credits of electives.

Admission Requirements

Recommended application deadline for FALL entry: **July 1**

Recommended application deadline for SPRING entry: **November 1**

Note: applications will continue to be accepted and considered for admission as long as seats remain in the class

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale.
- If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Completed application for admission, including:
 - [Online application](#)
 - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
 - Curriculum vita or resume
 - Two letters of recommendation
 - Official transcripts from all colleges and universities attended

Admissions Materials may be submitted to:

Chatham University

Office of Graduate Admission

Woodland Road

Pittsburgh, PA 15232

Fax: (412) 365-1609

Email: graduate@chatham.edu

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

Students completing the Master's Degree in Communication will be able to:

- Demonstrate knowledge of communication theory and its practical applications in a variety of situations and environments.
- Demonstrate knowledge of communication law and ethics, particularly with regard to social responsibility in the communications field.
- Apply communication research and theory in a professional context.
- Solve concrete communication problems within organizations and larger social systems.
- Communicate their ideas effectively and professionally through oral communication, the written word, and a variety of media.

Students in the Health Communication Track will be able to:

- Adapt complex medical and scientific messages for specific publics, thereby indicating applied scientific literacy
- Demonstrate knowledge of the role of media in prompting behavioral and attitudinal change
- Design effective measures to evaluate the success of a health communications campaign
- Design, plan, and implement a health communications campaign

Students in the Environmental Communication Track will be able to:

- Adapt complex environmental and scientific messages for specific publics, thereby indicating applied scientific literacy
- Demonstrate knowledge of the role of media in prompting behavioral and attitudinal change
- Demonstrate knowledge of risk perception and crisis communications play in defining environmental problems and policy
- Critically evaluate an environmental communications campaign
- Demonstrate comprehensive awareness of sustainability as a social construction

Students in the Strategic Communication Track will be able to:

- Demonstrate theoretical knowledge of organizational communication
- Design effective measures to evaluate the success of a strategic communications campaign
- Demonstrate media literacy

- Design effective measures to evaluate the success of a strategic communications campaign
- Design, plan, and implement a strategic communications campaign

Curriculum

Core Requirements

(5 required courses - 15 credit hours) - required in all three concentrations:

COM525	Communications Research and Theory	3 credits
	Course provides an overview of the major theoretical and research developments in the communications discipline. The emphasis will be on the application of theory to practice and on applied research. Topics include quantitative and qualitative research methods, research ethics, and the history of development of communication theories.	
COM528	Risk and Crisis Communications	3 credits
	Students acquire an understanding of crisis management and risk communication. Course topics include public opinion research, data collection and analysis, crisis and risk management theory, and communication tactics and strategies. Students develop case studies relating to their areas of professional interest.	
COM625	Communications Campaigns	3 credits
	Students explore the use of communication campaigns to reduce health risks and promote public health and awareness. Course prepares students to develop, implement, and assess health campaigns. Drawing on health behavior theory and communication research and theory, students work on case studies and develop original campaigns employing multiple communication channels.	
COM675	Communication Law & Ethics	3 credits
	Course provides an examination of the legal and ethical dimensions of communications. The historical development of media law is covered, although emphasis is placed on contemporary legal issues. Students explore complex ethical challenges facing media practitioners through case studies, exercises and class discussions.	
COM685	Communications Project	3 credits
	This is the capstone project for all students in the Master's in Communications program. This applied learning experience builds upon previous coursework. Students develop a major project designed to meet their professional interests. The project will demonstrate mastery of the knowledge and skills gained throughout the program.	

Environmental Communication

9 credits

COM515	Environmental Communications Course offers an overview of environmental communications providing an analysis of how individuals, institutions and corporations describe and portray our interactions with the environment. Discussion topics include environmental discourse, environmental conflicts, risk communication, environmental disasters, environmental social movements, and the nature-society relationship.	3 credits
SUS580	Sustainable Behavior Change This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	3 credits
And one of the following:		
SUS502	Sustainability and Systems In this course, students will develop skills necessary to understand, describe, and communicate complex systems. Working from examples, exercise and interactive discussions, students will learn to identify key drivers and leverage points for change. Students will learn to solicit useful information, model, and enact change using a various systems-based tools.	3 credits
SUS504	Foundations of Sustainability This course provides students the skills to understand, communicate, and critique the fundamentals of sustainability at multiple scales and across disciplines and cultures. It explores sustainability's origins and foundations, application, and assessment. We evaluate the inter-relationships among environmental, societal, and economic well-being and the implications on individual and social decision-making.	3 credits
SUS590	Careers in Sustainability This is a graduate level course that will contribute to the mission of SSE in training students in the theories, applications, and assessment of sustainability in a broad range of contexts.	3 credits
SUS603	Sustainability: Ethics, Equity, Justice This course focuses on the role of the "social" as one of the three pillars of sustainability. It explores historic and contemporary notions of ethics, social equity and social justice. It examines how these concepts can be applied to sustainability by studying local and global case studies.	3 credits

Pre-requisites Complete any 1 of the following courses:

- SUS504 Introduction to Sustainability and Systems
- SUS501 Fundamentals of Sustainability
- SUS503 Understanding Knowledge Across the Disciplines

SUS611	Decision Making Under Uncertainty	3 credits
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The application of design principles to data provides a bridge between the increasing volume of information that we encounter everyday to evidence-based, decision-making toward sustainable systems. This course provides a hands-on introduction to data analysis, data visualization techniques, and software for translating complexity and uncertainty into useful products.

SUS640	Sustainable Community Development	3 credits
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This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST509 Food Access
- SUS504 Foundations of Sustainability

Health Communication

9 credits

COM510	Health Communications	3 credits
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Course provides an introduction to the essential concepts and theories of health communication. Students study how individuals understand health issues and how communication processes help shape and influence our acceptance of health-related messages. Topics include health literacy, media coverage of health issues, and health risk communications.

BUS511	Health Policy & Advocacy	3 credits
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Analyze and synthesize innovative approaches to issues in health care delivery at all levels. Politics, policy, market forces, and advocacy are used to assess how system approaches affect health care delivery. Transformational leadership for political and policy activism are emphasized, while exploring regional, national, and global health issues and trends.

OR

BUS551	Informatics in Healthcare	3 credits
<p>This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>		
PWR632	Science and Environmental Writing	3 credits
<p>This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.</p>		

Strategic Communication

9 credits

COM550	Organizational Communications	3 credits
<p>Course covers current theory and research in the area of organizational communications. Includes formal and informal organizations and public and private organizations. Topics include organizational culture, employee information needs, decision making, leadership and power. Emphasis will be placed on developing the analytical tools to analyze and improve organizational communications.</p>		
COM518	Strategic Communications	3 credits
<p>Course provides an overview of concepts, tactics and skills employed in strategic internal and external communications. Students learn how to determine the communications objective(s), define the target audience(s) and stakeholders, and develop key messages to improve strategic communications.</p>		

OR

PWR621	Use of New and Social Media	3 credits
<p>This course seeks to give students the skills and confidence to create interesting and informative digital presentations based on simple presentation design and delivery options.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 Introduction to Professional Writing 		

Electives

6 credits

All students will round out their program of study with 6 credits of electives.

2022-2023 Course Catalog

Master of Arts in Creative Writing

The Master's in Creative Writing is a broad program of study (two years, 36 credits) designed to prepare students for careers as writers or other positions requiring similar professional skills, such as editing, publishing, and content development for the web; to enable students to improve their writing in more than one genre through interaction with our faculty and other writing students; and to become experienced critics of literary works.

Most full-time students will be able to complete the program in two years. This program is distinct from the MFA in Creative Writing in that no thesis is required. Except for the thesis, the program is exactly the same as the MFA in Creative Writing.

Learning Outcomes

Students in the Chatham MA program will:

- Develop and hone skills in writing, editing, and revision in the student's primary genre.
- Demonstrate the ability to read and respond thoughtfully and critically in both oral and written form to other student's work.
- Analyze and write with care about literary texts of considerable difficulty. Recognize critical positions, including the student's own critical position. Demonstrate a good reading knowledge of modern and contemporary literature.
- Cultivate a professional identity in terms of self-presentation in both written and oral forms. Write and publicly present (orally) a polished creative manuscript of marketable quality.

Curriculum

Degree Requirements

Complete 36 credit hours of graduate coursework beyond the BA or BS. Students who have not completed an undergraduate major in writing, or in English with a writing focus, may be required to take a basic core of 3 course before registering for the advanced curriculum.

One craft course in your primary genre [3 credits]

ENG523	The Craft of Creative Writing: Multiple Genres	3 credits
	This course may substitute for any other craft course for students specializing in any genre. Students will be introduced to the craft of poetry, fiction, and non-fiction, and will also be introduced to the workshop method and given instruction on sending out work for publication.	
ENG581	The Craft of Fiction	3 credits
	This is a required course for MFA students specializing in fiction. Students will experiment with creating scene, sense of place, summary, dialogue, framing, flashbacks, and transitions. Students will be introduced to the workshop method and given instruction on sending work out for publication.	
ENG582	The Art and Craft of Narrative	3 credits
	Readings and writing in this multi-genre course will focus on constructing narratives in fiction, nonfiction, poetry or writing for children. Students will be introduced to the workshop method and given instruction on sending work out for publication.	
ENG583	The Art and Craft of the Lyric	3 credits
	Readings and writing in this multi-genre course will focus on writing lyrically in poetry and prose. Students will be introduced to the workshop method and given instruction on sending work out for publication.	
<p>Primary genre craft course must be taken during the fall of student's first year. Craft courses are</p> <p>Prerequisites(s): for all workshops of any genre.</p> <p>One readings course in student's primary genre (3) chosen from the following:</p>		
ENG531	Readings in Contemporary Lyricism	3 credits
	This course is a graduate seminar focusing on the close reading of text from various genres (poetry, fiction, nonfiction, and children's writing) that use lyricism as a primary craft device. Designed to complement the craft workshop, this course or Readings in Contemporary Narrative is required for all MFA students.	
ENG532	Readings in Prose and Poetry	3 credits
	This course is a graduate seminar focusing on the close reading of prose and poetry drawn primarily from the modern and contemporary periods. Designed to complement the craft workshops, this course is required of all MFA students.	
ENG533	Readings in Contemporary Narrative	3 credits
	This course is a graduate seminar focusing on the close reading of narrative texts from several genres (fiction, nonfiction, poetry, and children's writing), drawn from modern and contemporary periods. Designed to complement craft workshops, this course or Readings in the Contemporary Lyric is required of all MFA students.	

Readings in prose

Two advanced writing workshops (6 credits) in your primary genre chosen from the following:

ENG535 Writing Poetry: Form 3 credits

A poetry writing workshop to focus on form. Pre Requisite: ENG583

Pre-requisites Complete all 2 of the following courses:

- ENG583 The Craft of Poetry
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG539 Writing Creative Nonfiction: Memoir 3 credits

A creative Non-Fiction workshop focusing mainly on the memoir. Pre requisite: ENG582

Pre-requisites Complete all 2 of the following courses:

- ENG582 The Craft of Nonfiction
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG537 Writing Poetry: Literary Movements 3 credits

A poetry workshop focusing on readings from a particular poetic movement, and writing poetry that models or responds to movement. Pre-requisite: ENG583

Pre-requisites Complete all 2 of the following courses:

- ENG583 The Craft of Poetry
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG548 Writing Creative Nonfiction 3 credits

This course is designed to teach the techniques and practice of creative nonfiction through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre-requisite: ENG582

Pre-requisites Complete all 2 of the following courses:

- ENG582 The Craft of Nonfiction
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG551 Writing Fiction: The Short Story 3 credits

This course furthers one's technique and practice of fiction writing via focusing on the short story. Classic models are read and analyzed for variety of P.O.V., character development, story structure, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in a workshop format.

Pre-requisites Complete all 2 of the following courses:

- ENG581 The Craft of Fiction
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG553 Writing Poetry **3 credits**

This course is designed to teach the techniques and practice of poetry writing through participation in a process of peer review and commentary, reading and discussions of selections of other poets and poems, and regular submissions of original creative compositions. The course is taught in a workshop format.

Pre-requisites Complete all 2 of the following courses:

- ENG583 The Craft of Poetry
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG554 Writing Fiction **3 credits**

This course is designed to teach the techniques and practice of fiction writing through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre Requisite: ENG581

Pre-requisites Complete any 1 of the following courses:

- ENG581 The Craft of Fiction
- ENG523 The Craft of Creative Writing: Multiple Genres
- ENG582 The Craft of Nonfiction

ENG557 Writing Fiction: Story Collections/Novel-in-Stories **3 credits**

This course furthers one's technique and practice of fiction writing via studying book length story collections and/or story cycles. Contemporary models are considered for their creative melding of varied themes. P.O.V.'s structures, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in in a workshop format. Pre requisite: ENG581

Pre-requisites Complete all 2 of the following courses:

- ENG581 The Craft of Fiction
- ENG523 The Craft of Creative Writing: Multiple Genres

ENG589 Creative Writing: Multi-Genre **3 credits**

A multi-genre craft course that includes poetry, fiction, creative nonfiction, children's writing and hybrid genres. This course fulfills the craft requirement for all genres.

Pre-requisites Complete the following course:

- ENG523 The Craft of Creative Writing: Multiple Genres

One of Environmental Imagination or Travel Writing:

ENG584 The Environmental Imagination **3 credits**

This is a multi-genre course that focuses on the art and craft of nature and environmental writing. Students will read and study contemporary nature and environmental writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.

ENG585	Travel Writing	3 credits
<p>This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>		

Four content courses (12 credits), at least 2 of which must be literature-based courses.

Sample courses include:

ENG546	Wildness and Literature	3 credits
<p>Students read poetry, nonfiction and fiction that explore the relationship between wilderness and humans as well as the relationship between wilderness and culture. This seminar will trace the idea of wilderness in American literature through the twenty-first century.</p>		

ENG552	Ecofeminist Literature	3 credits
<p>This course brings together theoretical, non-fictional, and fictional approaches to the study of women and the environment. This course focuses particularly on how representations of women and environment can help students rethink and re-imagine their relationships to the Earth.</p>		

One elective (3) from any course in the MFA program that does not require pre-requisites

Master of Arts in Film and Digital Technology (MA/MFA)

The Film and Digital Technology MA allows filmmakers and media creators to collaborate and customize their learning according to their personal interests and areas of specialization. Combining technical skills, screenwriting, and a solid foundation in theory, the program helps students develop a unique approach to storytelling regardless of genre.

Learning Outcomes

1. Media Literacy, Analysis and Context

- a. Students must have a historical understanding of the media they are using and the ideas they are pursuing in their creative work.
- b. Students must be aware of major theories influencing the photography, graphic design, film, video and new media field.
- c. Students must develop original and well-informed responses to theoretical and critical analysis.
- d. Students must look for interdisciplinary relationships between media arts and other fields of research.

2. Creative Processes

- a. Students must develop and transform original concepts into well-conceptualized projects - demonstrating a competency in project design development.
- b. Students must choose appropriate media for the development of their project and/or idea.
- c. Students must communicate their processes through various stages of development.

3. Technical Fundamentals

- a. Students must have knowledge of the technology they are utilizing for their projects (saving/storing files, various software packages and techniques, hardware, scanning, photo and digital video equipment).
- b. Students must create original projects that draw on their knowledge of the technological form in order to thoroughly investigate relationships between concept development and media used.
- c. Students must properly troubleshoot and solve technical-related problems.

4. Professional Practice

- a. Students must develop projects with an understanding of a diversified audience.
- b. Students must properly document their projects, choosing appropriate forms of media.
- c. Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution or field contribution.
- d. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- e. Students must develop attitudes of professional responsibility and accountability.
- f. Students must develop professional discipline (time-management, organizational skills).

Curriculum

MA Degree Requirements

30 credits, including:

FDT543	The Media Production Industry	3 credits
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This course is offered in the final semester of the program and is designed to enhance the ability of graduates to establish themselves in the media production industry.

OR

FDT571	e-Merging Media I	3 credits
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Maps ways the web can be utilized for the production of alternative narratives. Enables students to analyze and create works online using web-cams, streaming media, and interactive web-based projects. Additional fees: Course Computing fee

FDT550	Media Project I: Digital Video Production	3 credits
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Media Project I introduces the production process for digital video and other media work, from concept to production to completed piece. This course provides an understanding of the tools for each step of production and students focus on the technical elements of shooting and editing video.

FDT563	Media Contexts I: Media History	3 credits
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Provides overview for incoming graduate students of current rhetorical concerns related to independent media, film production, and histories.

FDT641	The Craft of Screenwriting	3 credits
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Provides a focus on the art and craft of Screenwriting. Students will read and study contemporary Screenwriting, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to filmmakers in this genre.

OR

FDT671 Emerging Media II: Advanced Web Design **3 credits**
Focuses on the technical through advanced study. Students will produce DVD, CD-ROM, and other interactive projects. Additional Fees: Course Computing Fee

FDT650 Media Project II: Advanced Digital Video Production **3 credits**
The course expands on the knowledge gained in Media Project I and focuses on the nonlinear editing process. Students develop their existing foundational software knowledge, learn to navigate additional NLE systems used by the industry, and have the opportunity to explore how these programs can enhance traditional editing techniques.

FDT663 Media Contexts I: Theory **3 credits**
Analyzes the aesthetic conventions, narrative, and formats of new media, as well as the impact digital technologies have had on existing media.

FDT666 Cinematography and Lighting **3 credits**
In this course, students will focus on the skills required to make appropriate camera and lighting decisions under a variety of field and studio situations. Students will gain mastery of advanced concepts and principles of camera operation, camera movement, use of lenses, composition and lighting techniques used in digital filmmaking.

OR

FDT613 Special Topics **3 credits**
Special Topics Class

FDT675 Media Project III: Advanced Sound Production **3 credits**
Focuses on advanced sound recording, editing, and mixing technologies using Pro Tools digital audio workstation. Additional Fee(s): Course Computing fee

FDT676 Media Project IV: Visual Effects & Animation Modes **3 credits**
Extends to visual effects, animation modes and compositing. Students will utilize this course to develop their masters' thesis topic and begin pre-production processes. Additional Fee: Course Computing Fee

FDT698 Portfolio**3 credits**

The MA Portfolio is the final requirement for the MA degree. The Portfolio project must demonstrate the student's aesthetic, conceptual, and technical skills along with a strong personal artistic voice from the initial concept to the completed 15 minute short film. Additional fee(s): Applied laboratory fee

Pre-requisites Complete all 2 of the following courses:

- FDT550 Media Project I: Digital Video Production
- FDT650 Media Project II: Advanced Digital Video Production

MFA

In addition to the 30-credit Master of Arts in Film and Digital Technology, Chatham also offers an MFA (36 credit hours) in Film and Digital Technology. Admittance to the MFA program requires departmental approval and a six-credit thesis project.

FDT699 MFA Thesis**6 credits**

The MFA Thesis is the final requirement for completion of the MFA degree. Students will demonstrate the aesthetic, conceptual, intellectual, and technical skill in a research based written thesis and a 22-to-32 minute exhibition ready film. The thesis project must demonstrate advanced written and production skills. Additional fee(s): Applied laboratory fee.

Pre-requisites Complete all 2 of the following courses:

- FDT663 Media Contexts I: Theory
- FDT698 Portfolio

2022-2023 Course Catalog

Master of Arts in Food Studies & Master of Business Administration (MAFS/MBA)

Through this program, students earn both the Master of Arts in Food Studies and the Master of Business Administration. It includes core courses in both business and food studies, and courses that provide breadth and depth in food studies, business, and sustainable business. The degree requires 53 credits, and is designed to be completed by full time students in five semesters (includes fall, spring, and summer semesters). An optional first summer is offered for students who require prerequisites or simply want more time to take classes.

Students are expected to maintain full-time enrollment.

Each student also completes a thesis or project in Food Studies. The common preparatory courses provide all students with disciplinary training in natural and social sciences and business. Students gain a holistic understanding of food systems and traditional business skills. Internships and directed study in community settings are encouraged. Graduates will be uniquely prepared to work in various aspects of food systems in the real world.

Students meet all of the requirements for both the Master of Arts Food Studies and the Master of Business Administration. Please refer to those programs for details.

Admission Requirements

Priority Deadline for Fall - **February 1** (all application materials must be received by this date for first consideration of fellowships/assistantships)

Regular Application Deadline for Fall: **June 15**

Regular Application Deadline for Spring: **November 1**

Admission to the Dual Degree MAFS-MBA program will be based on:

- Baccalaureate degree from an accredited college or university
- Overall undergraduate GPA of 3.0 or above on a 4.0 scale (Applicants with less than a 3.0 who show extreme promise through other achievements may be granted conditional admission)
- Proficiency in written and oral communications, college level math, and computer usage including word processing, spreadsheets, databases, and the Internet are required
- [Completed application form](#), including:
 - Official transcripts from all colleges and universities attended
 - Curriculum vitae, résumé and/or additional information concerning professional or volunteer activities
 - Nonrefundable application fee of \$45 (unless application is [completed online](#))
- Two letters of recommendation from faculty and direct work supervisors that describe the applicant's:
 - Capacity for independent thinking
 - Written and verbal communication skills

- Ability to thrive in a collaborative, interdisciplinary academic setting
- In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
- Students must complete pre-requisite courses in Financial Accounting, Business Statistics and Introduction to Microsoft Excel prior to beginning the program

Learning Outcomes

Food Studies

Interdisciplinary breadth: Graduates will have the ability to articulate and integrate knowledge and skills across and within a variety of disciplines, particularly as these skills relate to the historical and contemporary organization of food provision and consumption.

Systems knowledge: Graduates will have a command of food systems as a conceptual and practical tool for understanding the connections between agriculture and food production, social configurations, cultural meanings, and environmental conditions. This goal includes understanding and applying various research methods to real-world problems.

Experiential learning: Graduates will form a direct relationship with the subject matter – the production of food – by participating in a wide variety of practical and applied situations. Mastery of technique, while significant in its own right, will be connected back to intellectual growth by evaluating its benefit to specific communities and by incorporating the experience into project outcomes.

Community building: Graduates will work as liaisons and collaborators in community-based projects, both in directed coursework and in internship and field experiences. Emphasis will be on task negotiation, network development, social interaction, and cultural acumen.

Communicative competence: Graduates will demonstrate ability to use history, ethics, culture, and empirical data to document and evaluate food systems through oral, written, and multi-modal means of representation.

Methodological depth: Graduates will design and carry out research projects after evaluating the effectiveness and applicability of various social scientific methods. By implementation, students will articulate research questions, assess the strengths and weaknesses of different research design and collection methods. Includes the ability to address cultural and ethical issues, evaluate existing studies and

Applied scientific literacy: Graduates will grasp basic scientific principles, empirical methods, and evaluative criteria in the biological and physical sciences. The goal is for students to analyze and evaluate empirical research for context-specific applications and communicate that data for a variety of audiences.

Technical competence in food production: Students will gain basic experience in growing, producing, and cooking food. From soil testing to knife skills, graduates will grasp the specific material competencies related to agriculture and cooking.

Comprehensive awareness of sustainability: Graduates will be versed in the complexities of defining and enacting sustainable practices related to food production and consumption. Using a systems analysis, they will be able to map the relationships between environment, social life, and sustenance.

Business Administration

In master's level programs, knowledge of the key content areas of business is assumed. Students without previous business courses take the Foundation Courses. Graduates of master's level programs acquire a depth of knowledge in these areas that exceeds that of the typical bachelor's degree graduate. Graduates of the MBA program are able to demonstrate that they possess business-specific content outcomes and business-related professional skills outcomes.

Graduates of the MBA program will be able to:

- Recognize problems in business settings and propose solutions
- Use strategic analysis and integration
- Apply creativity and innovation in business practice
- Apply quantitative methods to real-world business situations
- Evaluate the impact on business of the global environment
- Identify and understand the ethical obligations and responsibilities of business
- Communicate effectively in written materials to relevant publics
- Communicate professionally in spoken words in one-on-one or business presentation situations
- Work with a team of colleagues on projects
- Demonstrate project management skills
- Demonstrate leadership skills through the ability to set direction and work with others
- Understand a specific area of business practice in depth
 - Information on Concentrations in the MSUS + MBA program can be found [here](#)

Curriculum

Requirements

Students must meet all of the admission requirements for both the MAFS and MBA programs, and complete any prerequisite associated with either program. A total of 53 credits are required to earn the dual degree:

The MBA portion of the program consists of the following 24 credits

BUS570	Global Business	3 credits
	This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.	

BUS576	Sustainable Human Capital	3 credits
	Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.	
BUS672	Corporate Finance	3 credits
	This course deepens an understanding of financial analysis tools and concepts. Students will learn how and when to use the financial-analytical tools required to make effective business and policy decision. Functional areas addressed are assessing financial health, planning financial performance, interpretation of data and recommendations, supply-chain management.	
BUS577	Information Systems and Analytics	3 credits
	This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.	
BUS652	Managerial Accounting	3 credits
	This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.	
BUS618	Economics for Managers	3 credits
	This course teaches how economic tools and techniques can be used to solve business problems. Economics describes why firms do what they do and points to business strategies. The course focuses on economic applications. The course provides an understanding of how economics influences marketing, management, and other business-related decisions.	
BUS671	Marketing Management	3 credits
	This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.	

BUS698	Strategy and Entrepreneurship	3 credits
<p>"Develop strategies to gain and sustain competitive advantage. Examine the goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. Develop and implement strategy across industries, and as an entrepreneur, through case analyses and simulations. "</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS671 Marketing Management 		

Required Core Total: 24

The FST portion of the program consists of the following 29 credits

FST508	Food Systems	3 credits
<p>Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering the relationship between communities, agriculture, markets, and consumers.</p>		
FST509	Food Access	3 credits
<p>If food is a basic human right, how do societies create universal access to food? What is the moral ethical basis for making citizens food secure in an age of global inequality? To what extent does providing food access need to consider culturally appropriateness, nutrition, and sustainability, and justice?</p>		
FST510	Food, Culture, History	3 credits
<p>Provides an overview of food and diet in transnational history, emphasizing cultural impact of modernity of food gathering, farming, plant biology, the body and consumption, health, taste, and cuisine. Topics include the development of agriculture, the causes of famine, the disruptions of colonialism, global exchange, industrialization, migration, and commercial economic dominance of the food system.</p>		
FST511	Research Methods	3 credits
<p>Introduction to social science research methods applicable to the study of food and culture. Practicum includes ethnography, interviews, focus groups, survey research, oral history, textual analysis, cultural mapping, and visual methods. Applied approach to research: students will produce data for practical use in existing community or commercial projects.</p>		

FST698	Thesis/Project Course provides supervision and research guidance for Masters thesis or projects in Food Studies. Students will have instruction in data analysis, writing for public presentation and publication, professional development workshops, and community development issues.	1 credits
FST520	Basic Agroecology Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	3 credits
FST520L	Growing Sustainably Lab This course is a co-requisite to FST520, Growing Sustainably, and comprises the experiential lab component of the course. Students will engage in sustained research on sustainable agricultural projects, from biodynamic methods to soil or pest management comparatives. Course may be taken up to four times for credit.	1 credits
FST518	Business of Food and Agriculture In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems Complete any 1 of the following courses: <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	3 credits

Required Core Total: 20

Electives (choose 9 credits)

FST503	Urban Agriculture The Urban Agriculture course focuses on the practices and models of urban agriculture in a variety of different global contexts with an emphasis on Pittsburgh, PA. The course uses a lens of political ecology to understand the historical, cultural, ecological, and political factors that influence the practice of urban agriculture.	3 credits
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FST530	Sustainable Gastronomy This course covers the history of cooking as a profession and a skill set. Emphasis on gastronomy and culinary arts as both integrative creative enterprises and structured labor in specific contexts. The history of public cooking and dining, restaurants, communication of culture and cuisine, and procedures will be covered.	3 credits
FST502	Essential Readings in Food and Agriculture This class provides grounding in essential texts in the contemporary understanding of food and agriculture. Readings include key food histories, journalism, critical nutrition and food industry writers, and agriculture and environmental treatise. Class will meet monthly to analyze texts. Students will contribute to forum and blog discussions throughout the year.	1 credits
FST512	Practical Nutrition Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.	3 credits
FST505	Food and Representations Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.	3 credits
FST514	Wine, Ciders and Meads This course provides a detailed study of wines, grape varieties, ciders and mead. Offers an exploration of global wine regions and regional traditions for ciders and meads. Experiential components utilize local fruits and honey to produce experimental batches of wines and meads. Includes lab at Eden Hall and fieldwork component.	3 credits
FST515	Writing About Food Students will develop technique and skills for writing about food and culture by studying ethics; journalism; advertising, multimodal and new technology venues; recipe writing; food criticism; writing about food in a variety of genres from history to fiction, magazines, and websites. Course emphasizes both print and online media.	3 credits
FST518	Business of Food and Agriculture In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals,	3 credits

define and calculate a breakeven point, and budget formulation.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
 - FST508 Food Systems
- Complete any 1 of the following courses:
- FST509 Food Access
 - FST509 Food Access

FST522	GIS: Food and Agriculture This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.	3 credits
FST527	Permaculture Course explores natural systems, aboriginal knowledge and best practices for designing human systems, which reflect care of the earth. It integrates findings of agriculture, horticulture, ecology, alternative energy, community design and green building. Students learn methods of growing and living sustainably, with local examples and applications of permaculture design for Eden Hall.	3 credits
FST528	Tree Care This course provides an introduction to arboriculture, tree climbing and pruning. The class will teach proper tree pruning and the basics of climbing, as well as basic equipment safety, applicable to tree work in urban or agricultural settings, and an introduction to work as an arborist.	3 credits
FST531	Sustainable Fermentation Through hands-on production, tastings, lectures, students learn basics of fermentation, winemaking principles and practices, sensory evaluation through tastings, viticulture history, wine regions and types, winemaking methods, chemistry and winery operations. Local production includes root beer, beer, sake, local mead and vinegar. Emphasis will be on sustainable viticulture practices and local/global links.	3 credits
FST532	Sustainable Meat Production As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.	3 credits
FST602	Global Agriculture Examines how contemporary agricultural era is characterized by the simultaneous existence of radically different farming systems within the same region. Course explores prior examples historically and regionally. Focus is then on what makes the contemporary agricultural age different, including respect for 'traditional' approaches as viable 'alternatives'; social and scientific research supporting alternatives; farmers/practitioner	3 credits

awareness of options ;and consumer-citizens driven awareness and advocacy.

FST603	Food Journeys From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• FST508 Food Systems• FST509 Food Access	3 credits
FST607	Sustainable Consumption Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• FST508 Food Systems• FST508 Food SystemsComplete any 1 of the following courses:• FST509 Food Access• FST509 Food Access	3 credits
FST609	Dairy: From Pasture to Plate This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and political issues related to dairy production in the US. Key course themes include: dairy history; sustainable and conventional production; raw milk and consumption debates; livestock care; milking; cheese-making; dairy policy; international issues; and popular representation of dairy. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none">• FST508 Food Systems• FST509 Food AccessComplete all 2 of the following courses:• FST508 Food Systems• FST509 Food Access	3 credits
FST614	New Product Development This course will explore the new product development process from ideation to market. Students will study the methodologies and practices of product development in a traditional Consumer Packaged Good firm and apply modified methods to manage the new product development process for a start-up local distiller. Over the course of an academic year, students will develop and bring to market a liqueur to be sold by Pittsburgh Distilling Co. Pre-requisites Complete the following course: <ul style="list-style-type: none">• FST531 Sustainable Fermentation	3 credits

FST615	<p>Food, Labor, and Inequality</p> <p>In this course, we will focus on theoretical and applied frameworks for thinking about the labor of growing food, transporting it, transforming it into comestibles, and finally, serving and cleaning related to food consumption. The course considers how global labor shapes the availability and appropriateness of food for different populations and therefore includes a substantial analysis of gender, race, and social class. Readings and discussion will touch on migrant labor, domestic cooking, waiting and serving, agriculture, cooks and chefs, and food professionals.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems 	3 credits
FST616	<p>Cultivating the Midwest: Corn and Soybeans</p> <p>Combined with field experiences in western Minnesota, this course explores food and agriculture in the Midwestern U.S. Classroom work and field experiences will explore historical, cultural, agronomic, economic, and geopolitical issues, including corn and soybean production, processing and distribution, alternative agrifood networks, and other food systems issues in the Midwest.</p>	3 credits
FST622	<p>Advanced New Product Development</p> <p>This course explores new product development process from ideation to market. Students study methodologies and practices of product development in a Consumer Packaged Goods firm. Focus for the advanced course includes consumer testing, packaging development, and production process to develop and bring to market a liqueur sold by Pittsburgh Distilling.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST531 Sustainable Fermentation • FST614 New Product Development 	3 credits
FST624	<p>Chocolate: Politics and Pleasure</p> <p>This course will explore chocolate as a global product including history and culture, agriculture (growing trees, processing beans), direct/fair trade, labor and justice, health, chocolate production, sales, marketing, and sustainability. Experiential components include chocolate making, tempering; culinary practices, and site visits to chocolate manufacturers, culminating in the design and marketing of a sustainable chocolate product.</p>	3 credits
FST625	<p>U.S. Agricultural Policy</p> <p>This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems 	3 credits

- FST508 Food Systems

FST640	<p>Sustainable Community Development</p> <p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access • SUS504 Introduction to Sustainability and Systems 	3 credits
FST683	<p>Special Topics</p> <p>Special Topics</p>	3 credits
FST611	<p>Religion, Community, and Food</p> <p>This course explains the ways in which sustainability and communal religious life have intersected in the U.S. from the 17th century to the present. Using lecture readings, film, and independent research, we will study ethical farming practices, food sustainability, and moral food choices through the lens of American religious communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • FST508 Food Systems 	3 credits
BUS699	<p>Business Consulting Capstone</p> <p>This course is the culminating experience in the MBA program. Students apply professional-level business consulting skills learned in the MBA program. Business Consulting Capstone student teams solve business problems for businesses and entrepreneurs.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS672 Corporate Finance • BUS698 Strategy and Entrepreneurship 	3 credits
BUS562	<p>Global Procurement</p> <p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p>	3 credits

BUS641	Sustainable Supply Chain Management	3 credits
	This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.	
BUS513	Logistics and Operations	3 credits
	This course introduces students to technical tools and skills essential for problem solving and decision-making in logistics and operations management. Topics may include inventory optimization, network planning, demand forecasting, transportation planning, and productions planning. Mastery of quantitative methods using spreadsheet modeling is required for all students.	
BUS639	Sustainability and Assessment Reporting	3 credits
	An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.	
SUS580	Sustainable Behavior Change	3 credits
	This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	
BUS550	Innovation and Commercialization	3 credits
	This course focuses on how to successfully commercialize an innovation. Understanding commercialization activities such as pre-product launch planning, market testing, actual product launch, and post-launch follow-up is a major part of the course. The course provides a run-through of the complete cycle from idea to market entry.	
BUS623	Strategic Performance for Executives	3 credits
	This course will cover issues specific to business leaders such as conflict management, negotiation and persuasion, mentoring structures, crisis communication, and organizational change. Other topics will include implicit and explicit attitude toward authority in the workplace; implicit social cognition; attitudes, self-esteem, and stereotypes, etc.	
BUS575	Leading Organizations and Projects	3 credits
	The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.	

BUS582	Foundations of Project Management	3 credits
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This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.

BUS680	Complex Issues in Project Management	3 credits
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Case studies and simulations engage students in the examination of complex issues in project management, such as control, portfolio management, and rescuing failing projects. The Student will be able to analyze, evaluate, and optimize projects in specific environments and industries.

Pre-requisites Complete the following course:

- BUS582 Foundations of Project Management

2022-2023 Course Catalog

Master of Arts in Food Studies (MA)

The Masters of Arts in Food Studies emphasizes a holistic approach to food systems, from agriculture and food production to cuisines and consumption, providing intellectual and practical experience from field to table. Graduates gain analytical and experiential knowledge of global and local food systems. Academic courses provide a critical framework, emphasizing the ways people relate to food within a cultural and historical context. Analyses of global, environmental, and gender issues are centralized in the study of the food system as a cultural, economic, and geographic entity. The 388-acre Eden Hall Campus, with its organic gardens, apiaries, orchards, kitchen and root cellar, provides a working environment for engagement with the practice and pedagogy of sustainable agriculture and culinary arts.

Food Studies is the interdisciplinary domain that includes agricultural and culinary history as well as sociological, cultural, political, economic, and geographic examinations of food production and consumption. At the heart of the curriculum model are a number of common preparatory, experiential, and core courses, which allow students to develop a shared knowledge base and community-based networks. The common preparatory courses provide all students with disciplinary training in both natural and social sciences, linking real world problems with ethics, theory, history, communication, research skills, and experiential learning. Internships and directed study in community settings are encouraged.

Admission Requirements

The following are requirements of admission to the Master of Food Studies program:

- A baccalaureate degree from an accredited college or university
- Overall grade point average (GPA) of 3.0 or better on a 4.0 scale. Applicants with less than a 3.0 who show extreme promise through other achievements may be granted conditional admission.
- Official undergraduate and graduate transcripts
- 2 letters of recommendation preferably from an academic source
- Curriculum vitae or resume
- In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
- Additional writing sample submission encouraged but optional
- Completed Application Form, which can be found at <http://apply.chatham.edu>.

Admission Deadlines

- Priority Deadline for Fall - **February 1** (all application materials must be received by this date for first consideration of fellowships/assistantships)
- Regular Application Deadline for Fall - **June 15**
- Regular Application Deadline for Spring - **November 1**

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the IDP Portal Site. All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

Interdisciplinary breadth: Graduates will have the ability to articulate and integrate knowledge and skills across and within a variety of disciplines, particularly as these skills relate to the historical and contemporary organization of food provision and consumption.

Systems knowledge: Graduates will have a command of food systems as a conceptual and practical tool for understanding the connections between agriculture and food production, social configurations, cultural meanings, and environmental conditions. This goal includes understanding and applying various research methods to real-world problems.

Experiential learning: Graduates will form a direct relationship with the subject matter – the production of food – by participating in a wide variety of practical and applied situations. Mastery of technique, while significant in its own right, will be connected back to intellectual growth by evaluating its benefit to specific communities and by incorporating the experience into project outcomes.

Community building: Graduates will work as liaisons and collaborators in community-based projects, both in directed coursework and in internship and field experiences. Emphasis will be on task negotiation, network development, social interaction, and cultural acumen.

Communicative competence: Graduates will demonstrate ability to use history, ethics, culture, and empirical data to document and evaluate food systems through oral, written, and multi-modal means of representation.

Methodological depth: Graduates will design and carry out research projects after evaluating the effectiveness and applicability of various social scientific methods. By implementation, students will articulate research questions, assess the strengths and weaknesses of different research design and collection methods. Includes the ability to address cultural and ethical issues, evaluate existing studies and

Applied scientific literacy: Graduates will grasp basic scientific principles, empirical methods, and evaluative criteria in the biological and physical sciences. The goal is for students to analyze and evaluate empirical research for context-specific applications and communicate that data for a variety of audiences.

Technical competence in food production: Students will gain basic experience in growing, producing, and cooking food. From soil testing to knife skills, graduates will grasp the specific material competencies related to agriculture and cooking.

Comprehensive awareness of sustainability: Graduates will be versed in the complexities of defining and enacting sustainable practices related to food production and consumption. Using a systems analysis, they will be able to map the relationships between environment, social life, and sustenance.

Curriculum

Core Courses

24 credits

FST508	Food Systems Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering the relationship between communities, agriculture, markets, and consumers.	3 credits
FST509	Food Access If food is a basic human right, how do societies create universal access to food? What is the moral ethical basis for making citizens food secure in an age of global inequality? To what extent does providing food access need to consider culturally appropriateness, nutrition, and sustainability, and justice?	3 credits
FST510	Food, Culture, History Provides an overview of food and diet in transnational history, emphasizing cultural impact of modernity of food gathering, farming, plant biology, the body and consumption, health, taste, and cuisine. Topics include the development of agriculture, the causes of famine, the disruptions of colonialism, global exchange, industrialization, migration, and commercial economic dominance of the food system.	3 credits
FST511	Research Methods Introduction to social science research methods applicable to the study of food and culture. Practicum includes ethnography, interviews, focus groups, survey research, oral history, textual analysis, cultural mapping, and visual methods. Applied approach to research: students will produce data for practical use in existing community or commercial projects.	3 credits
FST698	Thesis/Project Course provides supervision and research guidance for Masters thesis or projects in Food Studies. Students will have instruction in data analysis, writing for public presentation and publication, professional development workshops, and community development issues.	1 credits
FST621	Applied Methods This course is designed to help the student deepen their facility with qualitative and/or quantitative research methods to better understand diverse issues in the interdisciplinary field of food studies. The student will design, conduct, and/or analyze research as part of a thesis or other large project.	1 credits

FST520	Basic Agroecology	3 credits
	Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	
FST520L	Growing Sustainably Lab	1 credits
	This course is a co-requisite to FST520, Growing Sustainably, and comprises the experiential lab component of the course. Students will engage in sustained research on sustainable agricultural projects, from biodynamic methods to soil or pest management comparatives. Course may be taken up to four times for credit.	
FST530	Sustainable Gastronomy	3 credits
	This course covers the history of cooking as a profession and a skill set. Emphasis on gastronomy and culinary arts as both integrative creative enterprises and structured labor in specific contexts. The history of public cooking and dining, restaurants, communication of culture and cuisine, and procedures will be covered.	
Internship in any combination, totaling 3 credits:		
FST691	Internship	1 credits
	Internship placement will focus on local nonprofits, advocacy group, community projects, food companies, farms, co-ops, food producers, and policy agencies. Directed experience can include developing products, community knowledge, food system data, or promotional materials (course requires instructor signature).	
FST692	Internship	2 credits
	Internship placement will focus on local nonprofits, advocacy group, community projects, food companies, farms, co-ops, food producers, and policy agencies. Directed experience can include developing products, community knowledge, food system data, or promotional materials (course requires instructor signature).	
FST693	Field Work Practicum	3 credits
	Students engage in semester long field work and internships. Class meetings address ethical, logistical, and intellectual issues of community-based work in Food Studies. Site-based project development and implementation occurs in supervised and collaborative settings. Individual meetings with professor provide career development and advance research proposal skills.	

Electives

18 credit hours

From the list of potential electives, students may design an area of concentration with their advisor, including Communication and Writing; Food Politics; Sustainable Agriculture; and Markets.

FST502 Essential Readings in Food and Agriculture 1 credits

This class provides grounding in essential texts in the contemporary understanding of food and agriculture. Readings include key food histories, journalism, critical nutrition and food industry writers, and agriculture and environmental treatise. Class will meet monthly to analyze texts. Students will contribute to forum and blog discussions throughout the year.

FST503 Urban Agriculture 3 credits

The Urban Agriculture course focuses on the practices and models of urban agriculture in a variety of different global contexts with an emphasis on Pittsburgh, PA. The course uses a lens of political ecology to understand the historical, cultural, ecological, and political factors that influence the practice of urban agriculture.

FST512 Practical Nutrition 3 credits

Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.

FST504 Food Science Principals 3 credits

We will study scientific literature on nutrient availability before and after cooking, learn about chemical and physical and visual changes to food through various storage and cooking methods and investigate our sensory responses to certain foods in various types of physical and cultural settings.

FST505 Food and Representations 3 credits

Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.

FST514 Wine, Ciders and Meads 3 credits

This course provides a detailed study of wines, grape varieties, ciders and mead. Offers an exploration of global wine regions and regional traditions for ciders and meads. Experiential components utilize local fruits and honey to produce experimental batches of wines and meads. Includes lab at Eden Hall and fieldwork component.

FST515	Writing About Food	3 credits
	Students will develop technique and skills for writing about food and culture by studying ethics; journalism; advertising, multimodal and new technology venues; recipe writing; food criticism; writing about food in a variety of genres from history to fiction, magazines, and websites. Course emphasizes both print and online media.	
FST518	Business of Food and Agriculture	3 credits
	In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems Complete any 1 of the following courses: <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	
FST522	GIS: Food and Agriculture	3 credits
	This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.	
FST527	Permaculture	3 credits
	Course explores natural systems, aboriginal knowledge and best practices for designing human systems, which reflect care of the earth. It integrates findings of agriculture, horticulture, ecology, alternative energy, community design and green building. Students learn methods of growing and living sustainably, with local examples and applications of permaculture design for Eden Hall.	
FST528	Tree Care	3 credits
	This course provides an introduction to arboriculture, tree climbing and pruning. The class will teach proper tree pruning and the basics of climbing, as well as basic equipment safety, applicable to tree work in urban or agricultural settings, and an introduction to work as an arborist.	
FST531	Sustainable Fermentation	3 credits
	Through hands-on production, tastings, lectures, students learn basics of fermentation, winemaking principles and practices, sensory evaluation through tastings, viticulture history, wine regions and types, winemaking methods, chemistry and winery operations. Local production includes root beer, beer, sake, local mead and vinegar. Emphasis will be on sustainable viniculture practices and local/global links.	

FST532	Sustainable Meat Production	3 credits
	As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.	
FST602	Global Agriculture	3 credits
	Examines how contemporary agricultural era is characterized by the simultaneous existence of radically different farming systems within the same region. Course explores prior examples historically and regionally. Focus is then on what makes the contemporary agricultural age different, including respect for 'traditional' approaches as viable 'alternatives'; social and scientific research supporting alternatives; farmers/practitioner awareness of options ;and consumer-citizens driven awareness and advocacy.	
FST603	Food Journeys	3 credits
	From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 	
FST607	Sustainable Consumption	3 credits
	Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	
FST609	Dairy: From Pasture to Plate	3 credits
	This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and political issues related to dairy production in the US. Key course themes include: dairy history; sustainable and conventional production; raw milk and consumption debates; livestock care; milking; cheese-making; dairy policy; international issues; and popular representation of dairy.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 	

Complete all 2 of the following courses:

- FST508 Food Systems
- FST509 Food Access

FST611 Religion, Community, and Food

3 credits

This course explains the ways in which sustainability and communal religious life have intersected in the U.S. from the 17th century to the present. Using lecture readings, film, and independent research, we will study ethical farming practices, food sustainability, and moral food choices through the lens of American religious communities.

Pre-requisites Complete the following course:

- FST508 Food Systems

FST614 New Product Development

3 credits

This course will explore the new product development process from ideation to market. Students will study the methodologies and practices of product development in a traditional Consumer Packaged Good firm and apply modified methods to manage the new product development process for a start-up local distiller. Over the course of an academic year, students will develop and bring to market a liqueur to be sold by Pittsburgh Distilling Co.

Pre-requisites Complete the following course:

- FST531 Sustainable Fermentation

FST615 Food, Labor, and Inequality

3 credits

In this course, we will focus on theoretical and applied frameworks for thinking about the labor of growing food, transporting it, transforming it into comestibles, and finally, serving and cleaning related to food consumption. The course considers how global labor shapes the availability and appropriateness of food for different populations and therefore includes a substantial analysis of gender, race, and social class. Readings and discussion will touch on migrant labor, domestic cooking, waiting and serving, agriculture, cooks and chefs, and food professionals.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST508 Food Systems

FST616 Cultivating the Midwest: Corn and Soybeans

3 credits

Combined with field experiences in western Minnesota, this course explores food and agriculture in the Midwestern U.S. Classroom work and field experiences will explore historical, cultural, agronomic, economic, and geopolitical issues, including corn and soybean production, processing and distribution, alternative agrifood networks, and other food systems issues in the Midwest.

FST622 Advanced New Product Development

3 credits

This course explores new product development process from ideation to market. Students study methodologies and practices of product development in a Consumer Packaged Goods firm. Focus for the advanced course includes consumer testing, packaging development, and production process to develop and bring to market a liqueur sold by

Pittsburgh Distilling.

Pre-requisites Complete all 2 of the following courses:

- FST531 Sustainable Fermentation
- FST614 New Product Development

FST624	Chocolate: Politics and Pleasure	3 credits
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This course will explore chocolate as a global product including history and culture, agriculture (growing trees, processing beans), direct/fair trade, labor and justice, health, chocolate production, sales, marketing, and sustainability. Experiential components include chocolate making, tempering; culinary practices, and site visits to chocolate manufacturers, culminating in the design and marketing of a sustainable chocolate product.

FST625	U.S. Agricultural Policy	3 credits
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This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST508 Food Systems

FST640	Sustainable Community Development	3 credits
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This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.

Pre-requisites Complete any 1 of the following courses:

- FST508 Food Systems
- FST509 Food Access
- SUS504 Introduction to Sustainability and Systems

FST683	Special Topics	3 credits
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Special Topics

2022-2023 Course Catalog

Master of Arts in Graphic Design (MA/MFA)

The Master of Arts in Graphic Design (MGD) program is to prepare students to face the changing role of today's graphic designers and embrace new creative opportunities as they arise. At the core of this program is the ability to develop critical connections between the designer, the designed, and the end-user. The MGD bridges creativity with environmental graphics and story-telling through branded identities.

In addition to the 30-credit MGD program, Chatham also offers an MFA (36 credit hours) in Graphic Design. Admittance to the MFA program requires departmental approval and a six-credit thesis project.

Admission Requirements

Recommended Application Deadline for Fall entry July 1st

*Note: applications will continue to be accepted and considered for admission if seats remain in the class.

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale. If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Completed application for admission, including:
 - Online application
 - Admissions Essay (current prompt found in application portal)
 - Curriculum vitae or resume
 - Two letters of recommendation
 - Official transcripts from all colleges and universities attended
 - Portfolio or other examples of your work in various forms of media; please provide a wide array of two-dimensional works: drawing, painting, printmaking, photography, graphics, etc. Can be submitted as an uploaded document and/or a website shared.

Admissions Materials can be uploaded in the application or submitted to:

Chatham University
Office of Graduate Admission-Berry Hall
Woodland Road
Pittsburgh, PA 15232

[Email Admissions](#)

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the IDP Portal Site. All IDP applicants

should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

International Applicants

International Applicants must submit additional documentation to the Office of Admissions. A list of these documents can be found on the International Admission web page.

Learning Outcomes

1. Media Literacy, Analysis and Context

- a. Students must have a historical understanding of the media they are using and the ideas they are pursuing in their creative work.
- b. Students must be aware of major theories influencing the photography, graphic design, film, video and new media field.
- c. Students must develop original and well-informed responses to theoretical and critical analysis.
- d. Students must look for interdisciplinary relationships between media arts and other fields of research

2. Creative Processes

- a. Students must develop and transform original concepts into well-conceptualized projects - demonstrating a competency in project design development.
- b. Students must choose appropriate media for the development of their project and/or idea.
- c. Students must communicate their processes through various stages of development.

3. Technical Fundamentals

- a. Students must have knowledge of the technology they are utilizing for their projects (saving/storing files, various software packages and techniques, hardware, scanning, photo and digital video equipment).
- b. Students must create original projects that draw on their knowledge of the technological form in order to thoroughly investigate relationships between concept development and media used.
- c. Students must properly troubleshoot and solve technical-related problems.

4. Professional Practice

- a. Students must develop projects with an understanding of a diversified audience.
- b. Students must properly document their projects, choosing appropriate forms of media.
- c. Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution or field contribution.
- d. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- e. Students must develop attitudes of professional responsibility and accountability.
- f. Students must develop professional discipline (time-management, organizational skills).

Curriculum

MA Degree Requirements

VCD510	Visual Communication Design: Branding	3 credits
<p>This course offers a systematic approach to concept development and the problem-solving process applied to brand construction. Students build visual identities for a variety of organizations through generative design processes for communication goals. Particular attention is given to logo and type mark development, photography/illustration, use of the grid system, color story, typography and messaging.</p>		
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VCD520	Visual Communication Design: Typography	3 credits
<p>This course examines the concrete and conceptual aspects of typography as a communications tool. Typographic history, anatomy of form, type specimens, and grid structures, serve as foundations for the intersections between form and meaning. Typographic projects will range from typographic compositional studies, expressive typography, to information-focused typographic design systems.</p>		
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FDT550	Media Project I: Digital Video Production	3 credits
<p>Media Project I introduces the production process for digital video and other media work, from concept to production to completed piece. This course provides an understanding of the tools for each step of production and students focus on the technical elements of shooting and editing video.</p>		
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FDT571	e-Merging Media I	3 credits
<p>Maps ways the web can be utilized for the production of alternative narratives. Enables students to analyze and create works online using web-cams, streaming media, and interactive web-based projects. Additional fees: Course Computing fee</p>		
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VCD530	Print Design	3 credits
<p>This course introduces students to the roles that graphic design plays in society as shapers of style and ritual within contexts of community and commerce. The class will work collaboratively in the development of concepts, process design, layout, scheduling, production and the construction, expense, and production of the print publication artifact.</p>		
<hr/>		
VCD620	Digital Illustration Methods	3 credits
<p>Digital illustration tools and methods are explored within the context of publication and branding. The contemporary illustrator becomes a conceptual interpreter of content through the potential mixing of primary graphic assets and secondary collected and manipulated graphic assets from digital archives and resources. Methods of information gathering are developed from photography, library, and archival research. This course includes a foundation to Wacom drawing tablet capabilities. Processes and techniques from printmaking, painting, 2-D design, photography and drawing are mediated through digital software and hardware.</p>		

VCD540	History of Communication Design To be determined	3 credits
FDT671	Emerging Media II: Advanced Web Design Focuses on the technical through advanced study. Students will produce DVD, CD-ROM, and other interactive projects. Additional Fees: Course Computing Fee	3 credits
VCD670	Package Design Packaging design systems combines graphics, fundamentals of marketing and an understanding of form and structure. Packages are evaluated based on creative strategies developed from marketing positions. Individual brand identities are developed which include: naming, type, visual graphics, color schemes, and applied to various forms of packaging and extended lines. Packaging projects range from mass marketed food/beverage, electronic, and household sectors to luxury goods. Additional Fee(s): Course Computing LAB Fee	3 credits
VCD650	Portfolio This course provides students with essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Analysis of professional portfolios and research of target firm's requirements are completed to establish a deliverable format. Using advanced tools in Adobe InDesign and other design applications, students learn how to implement their portfolios as both print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered. The portfolios created in this course are used to market individual talents to any sector of the design profession. Additional Fee(s): Course LAB Fee	3 credits

MFA

In addition to the 30-credit MA in Graphic Design, Chatham also offers an MFA (36 credit hours) in Graphic Design. Admittance to the MFA program requires departmental approval and a six-credit thesis project.

Contact

Chatham University
Office of Graduate Admission-Berry Hall
Woodland Road Pittsburgh, PA 15232

[Email Admissions](#)

2022-2023 Course Catalog

Master of Arts in Psychology (MA)

The Chatham University Master of Arts in Psychology degree is a 36 credit hour degree that provides graduate level education and training in psychology. The mission of the MA in Psychology degree is to provide women and men a foundation in the study of human behavior and skills for working with people. Graduates of the MA in Psychology program are able to use their understanding of psychological science and theories to further their professional careers in many ways, including work in research settings, in human service, health, or educational organizations, and in doctoral programs in psychology. Students also benefit from the rich and stimulating environment of Chatham University.

Chatham's MA in Psychology program offers small classes with individualized attention, knowledgeable and experienced faculty, opportunities to conduct research, and activities fostering leadership skill. The program emphasizes critical thinking and problem-solving skills, self-awareness, attention to socio-cultural diversity, application of knowledge, and both collaborative and independent work. The degree does not provide the education needed for licensure as a psychologist or counselor.

Admission Requirements

Application Deadline

Fall Recommended Deadline - July 1*

*Rolling admission for Fall entry until August 1

Spring Recommended Deadline - November 1

Pre-requisites

- A baccalaureate degree from an accredited college or university
- Minimum GPA of a 3.0
- Successful completion of an undergraduate psychology course with at least a B grade

Application Requirements

Applicants to the MA in Psychology program must submit the following information to the Office of Admissions for review:

- Completed [online](#) application
- Official Transcripts from **all** colleges and universities you have attended including those in which you may **have transfer credits**
- Curriculum Vitae or Resume
- Two (2) Academic or Professional Letters of Recommendation
- In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?

Admission Process

After verifying that the minimum academic requirements are met, the program utilizes a holistic approach in reviewing the candidate's entire application. This process is intended to seek talented and qualified individuals of all backgrounds. Taking multiple factors into consideration during our admissions process positively achieves the educational benefits of a student body that is both diverse and academically excellent. This approach includes an evaluation of each candidate's academic achievement as well as their personal characteristics, attributes and experiences. As part of the holistic review, **Chatham reserves the right to request a background check prior to offer of admission.**

A phone interview will be required of all applicants. This process will take place after your application has been completed and has been given to the faculty admission committee for evaluation.

Applicants will be informed by the Office of Admissions about whether or not they have been accepted into the MAP program.

International Applicants

International Applicants to the MA in Psychology program must submit additional documentation to the Office of Admissions.

A list of these documents can be found on the [International Admission](#) web pages.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

Masters of Counseling and Psychology Accreditation Council 2017 Standards

A. Professional identity, and ethical and professional standards

1. *Ethical/Legal Standards and Policy*: Demonstrates knowledge and application of ethical concepts, and awareness of legal issues regarding professional activities with individuals, groups, and organizations
 - a. Knowledge of ethical, legal and professional standards and guidelines: Demonstrates knowledge and understanding of relevant ethical/professional codes, standards and guidelines, laws, statutes, rules, and regulations
 - b. Awareness and application of ethical decision making: Recognizes situations that challenge adherence to professional values and applies an ethical decision-making model to ethical dilemmas
 - c. Ethical Conduct: Integrates ethical values into professional conduct
2. *Professional Values and Attitudes*: Exhibits behavior and comporment that reflect the values

and attitudes of counseling and psychology

- a. Evidences adherence to professional values throughout professional work
- b. Demonstrates understanding of counseling and psychological practice as an applied behavioral science
- c. Maintains professionally appropriate communication and conduct across different settings
- d. Assesses personal accountability and accepts responsibility for own actions
- e. Demonstrates concern for the welfare of others
- f. Displays an appropriately defined professional identity

B. Evidence-based theories and practice of counseling and psychotherapy

1. *Knowledge*: Demonstrates knowledge of individual and group theories of counseling and psychotherapy consistent with program orientation and goals
2. *Relationships*: Relates effectively with individuals, groups, and communities
 - a. Forms and maintains productive and respectful relationships with clients, peers/colleagues, supervisors, and professionals from within and across disciplines
 - b. Demonstrates understanding of counseling and psychological practice as an applied behavioral science
 - c. Negotiates differences and handles conflict satisfactorily
 - d. Provides effective feedback to others, receives feedback non-defensively, and integrates feedback appropriately
 - e. Communicates clearly using verbal, nonverbal, and written skills in a professional context; demonstrates clear understanding and use of professional language
3. *Intervention*: Applies evidence-based intervention and prevention strategies designed to alleviate suffering and to promote health and well-being of individuals, groups, and/or organizations (e.g., career, group, family, and/or systems-level interventions)
 - a. Formulates and conceptualizes cases; plans and implements interventions utilizing at least one consistent theoretical orientation
 - b. Displays skills in developing the therapeutic alliance
 - c. Evaluates intervention progress and modifies intervention or prevention strategies on the basis of evaluation of clients' or groups' progress and/or client feedback

C. Multiculturalism and diversity

Demonstrates knowledge, self-awareness, and skills in working with individuals, groups, and communities who represent various cultural and personal backgrounds and characteristics

1. *Knowledge and Self-Awareness*:
 - a. Demonstrates knowledge and awareness of self, as shaped by individual and cultural diversity (e.g., cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status) and context.
 - b. Demonstrates knowledge and awareness of others, as shaped by individual and cultural diversity and context.
2. *Skills*: Applies knowledge of self and others as cultural beings in assessment, treatment,

consultation, and all other professional interactions; is able to work effectively with diverse individuals in assessment, treatment, and consultation.

D. Theories of psychopathology and relevant classification systems

1. Knowledge:

- a. Demonstrates knowledge of theories of psychopathology, including but not limited to, biological and sociocultural theories
- b. Demonstrates knowledge of classification systems of behavior and evaluates limitations of those systems

2. *Skills:* Applies concepts of normal/abnormal behavior to case formulation, diagnosis, and treatment planning in the context of stages of human development and diversity

E. Tests, measurements, and other assessments of behavior

1. Knowledge:

- a. Demonstrates knowledge of content, reliability and validity, and purposes of assessment measures frequently used by counselors and psychological practitioners.
- b. Evaluates strengths and limitations (including cultural limitations) of administration, scoring, and interpretation of assessment measures.

2. *Skills:* Selects and utilizes appropriate assessment measures across domains of functioning, practice settings, and cultural groups.

F. Research methods and program evaluation

1. Knowledge:

- a. Demonstrates knowledge of scientific methods commonly used by counselors and psychology practitioners in their clinical work
- b. Demonstrates knowledge of use of scientific methods to add to the knowledge base of counseling and psychology
- c. Demonstrates knowledge of application of scientific methods to evaluating practices, interventions, and programs

2. *Skills:* Critiques published research effectively

G. Career development and/or the role of work in peoples' lives

1. Demonstrates knowledge of the role of work in peoples' lives

2. Demonstrates understanding of the development of work and career choices across the life span

H. Biological basis of behavior

1. Demonstrates knowledge and understanding of the relationship between biological factors and human functioning

I. Developmental basis of behavior

1. Demonstrates knowledge and understanding of human development, wellness, and learned bases of behavior across the lifespan.

J. Social/organizational/community basis of behavior

1. Demonstrates knowledge of individuals in the context of their environment and how the environment (e.g., geographical, ideological, demographic, familial, institutional) affects functioning. Demonstrates understanding of the use of systems changes (whether by prevention or intervention) to enhance the functioning of individuals, families, groups, organizations, and/or institutions.

K. Understanding and use of supervision during applied experiences

1. *Knowledge*: Demonstrates understanding of the role and practice of supervision.
2. *Skills*
 - a. Responds appropriately to supervision
 - b. Engages in reflective practices by synthesizing supervisor feedback and experience in applied work
 - c. Engages in appropriate self-care strategies

Curriculum

Core Courses for MA in Psychology Degree

Required for both concentrations

PSY501	Foundations of Counseling Psychology The course introduces students to the field of counseling psychology, including the historical roots, current values, and training curriculum. The course also engages students in experiential learning of the theory and practice of basic counseling skills.	3 credits
PSY605	Biopsychology This course focuses on the development of the brain and nervous system, interconnections between the human body's biological systems, and types and mechanisms of psychopharmacological interventions for psychological disorders.	3 credits
PSY555	Statistics and Research Methods The course provides a basic review of descriptive and inferential statistics and how these techniques are used with research methods in counseling psychology. Students will become proficient in computer analysis of data sets, designing and evaluating research designs and techniques, and understanding primary research in counseling literature.	3 credits

PSY617	Psychology of Culture and Identity	3 credits
	The course addresses issues of culture and identity, as related to counseling and therapeutic relationships. Sociopolitical, socioeconomic, familial, and psychological aspects of diversity, identity, and culture are explored through readings, seminars, and experiential exercises. Students challenge underlying assumptions and develop effective skills to work with diverse populations.	
PSY629	Human Development across the Life Span	3 credits
	The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.	
PSY642	Assessment	3 credits
	The course covers the basics of psychological assessment. The importance of integrating information from various sources when formulating hypotheses and diagnostic impressions and when developing treatment plans is emphasized. Other topics include interviewing, mental status examinations, psycho-physiological strategies, psychological tests related to various diagnostic groupings, and program evaluation.	
PSY657	Psychopathology & Resilience	3 credits
	The course provides an overview of psychopathology. Students learn to recognize the complex biological, cultural, and environmental contributors to mental illness, and to diagnose mental disorders using standardized criteria. Students will also study the concept of resilience and its role in contributing to health and well-being.	
PSY658	Evidence-Based Practice	3 credits
	This course provides an introduction to evidence-based practice in applied psychology, emphasizing a counseling psychology perspective to understanding human problems. The course focuses on the methodological issues in developing an empirical basis for psychological treatments, and understanding the evidence base for treatment, therapist, client, and therapeutic relationship effects.	
PSY662	Theories and Techniques of Counseling	3 credits
	This course explored a variety of counseling theories and techniques to provide a foundation for the practice of professional counseling from a culturally sensitive perspective. The course emphasizes current professional research and practice related to counseling theories and techniques, and provides opportunities for skill practice.	

PSY672	Group Counseling	3 credits
<p>The course explores the theory and practice of group experience from the perspectives of a member and observer. Topics include basic elements of group dynamics, interpersonal styles as they affect or hinder group functioning, role identity, leadership style, and application of group skills in organizations.</p>		

PSY681	Professional Integration Seminar	3 credits
<p>The course explores ethical conceptualization, analysis, and practices of applied and counseling psychologists. Topics include the ethical standards of the American Psychological Association and the American Counseling Association, the history of applied psychology, and the developing mental health counseling movement. Certification, licensure, and regulatory practices are also discussed.</p>		

Elective Courses

PSY530	Introduction to Sport and Exercise Psychology	3 credits
<p>This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.</p>		

PSY602	Sport and Exercise Psychology Interventions	3 credits
<p>Students in this course will become competent in the understanding and application of the core mental skills of sport and exercise psychology across settings and across the lifespan.</p> <p>Pre-requisites Complete the following course: PSY530 Introduction to Sport and Exercise Psychology</p>		

PSY621	Advanced Seminar in Diversity Issues	3 credits
<p>The course further develops the multicultural competency of counselors in relation to specific selected topics related to diversity and counseling. This is an elective course.</p>		

PSY632	Positive Psychology	3 credits
<p>Positive Psychology is the study of how humans do well and flourish. This course is an introduction to positive psychology theories and techniques. Didactic, experiential, and interactive elements will be used to explore concepts, research, interventions, and exercises that positive psychology has contributed to the larger field of psychology.</p>		

PSY663	Foundations of Health Psychology	3 credits
	Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.	
PSY665	Addictions Counseling	3 credits
	The course addresses a variety of addiction topics, including chemical dependency, eating disorders, sexual addiction, the chemically dependent offender, and women's issues in addiction. Several treatment models are explored, with emphases on effectiveness of treatment approaches and on multicultural sensitivity.	
PSY668	Crisis, Trauma and Recovery	3 credits
	The course is an introduction to the field of psychological trauma, examining the historical development of trauma as a clinical entity and an overview of theories and strategies for treating trauma. Students will learn to identify and work with their own reactions to clients who present trauma issues.	
PSY671	Mindfulness Counseling	3 credits
	This course explores mindfulness and acceptance based approaches to counseling and discusses the integration of art and science when utilizing these approaches. Students will examine current research about efficacy of such approaches, and also develop beginning skills in these approaches.	
PSY673	Couples Counseling	3 credits
	This advanced course covers selected theories and techniques related to couples counseling. The emphasis in the course is on practical application of the theories. Pre-requisites Complete all 2 of the following courses: PSY501 Foundations of Counseling Psychology PSY662 Theories and Techniques of Counseling	
PSY676	Counseling Children and Adolescents	3 credits
	The course focuses on issues and concepts related to counseling children and adolescents with social and/or emotional problems. Topics include significant differences between children/adolescents and adults; theories of normal child development and temperament; and conceptualization and effective treatment of problems.	
PSY677	Grief Counseling	3 credits
	The course introduces students to the techniques, strategies, and treatment modalities counselors use to work with adults, children, and families dealing with bereavement. The class focuses on psychological, somatic, cultural, and spiritual aspects of grief and loss. Other topics included are interventions, community resources, and diverse religious and cultural practices.	

PSY678	Risk and Resilience in Childhood The course covers child/adolescent psychopathology and psychological assessment of children and adolescents. Specific topics include diagnostic and assessment issues specific to children and adolescents; psychological and developmental disorders specific to children and adolescents; and related social and cultural issues.	3 credits
PSY693	Independent Study Independent Study Pre-requisites Complete the following course: XXX123 Permission of Instructor	3 credits
PSY718	Psychology and Sustainability The course presents the interface between environment and sustainability issues and the discipline of counseling psychology. Students review psychological literature about the relationship between environmental problems/solutions and human health and well-being, as well as implications of this for psychologists' work with individuals, families, and communities.	3 credits

2022-2023 Course Catalog

Master of Arts in Teaching (MAT)

The Master of Arts in Teaching degree is a professional program that recommends students for teacher certification in PreK-4 education (PreK-4) and secondary (7-12), biology, chemistry, English, mathematics, physics, and social studies certification. The MAT also offers K-12 certification in art, which requires some coursework in both elementary and secondary education. Candidates interested in art or secondary education should hold a bachelor's degree in their specific field. Education courses are held both in class and online.

This program involves both classroom study and extensive field experiences, culminating in a fulltime, semester long Student Teaching experience. In accordance with the Pennsylvania State Department of Education (PDE) requirements, candidates must satisfy all regulations pertaining to teacher training contained in the Pennsylvania School Code. These regulations are subject to change by the State. Students will be required to comply with any such regulations that are instituted before they can apply for certification through PDE. In addition, students must have a valid (less than one year old) Child Abuse, Pennsylvania Criminal History and Federal Criminal History Record to enter a school for any and all field work. A P.P.D Tuberculin (TB) Test and a physical exam may also be required to complete field work.

Non-Degree Seeking Students:

At the discretion of the graduate program director, a qualified student can take up to 12 credit hours of graduate courses as a non-degree seeking student. Students who have been denied admittance into a program cannot register for courses as non-degree-seeking students. Students must earn a B or above in each course. Successful completion of 12 hours as a non-degree-seeking student does not imply admittance into the program. Courses taken as nondegree are not guaranteed to count towards the degree. In cohort programs, degree-seeking students will be given preference for available seats.

Additional Information:

All students seeking Pennsylvania state certification must have the following:

- six credits in English, including three credits in composition or writing and three credits in literature (American or British Literature), and
- six credits in college-level mathematics prior to entering the program.

Admission Requirements

Admission Deadlines

- Fall Recommended Deadline – July 1*
- *Rolling admission for Fall entry until August 1

Pre-requisites

- A baccalaureate degree from an accredited college or university
- Overall GPA of 3.0 on a 4.0 scale
- Applicants' transcripts will be reviewed to determine whether students have completed the academic requirements specified by the Pennsylvania Department of Education in the standards for the desired certification area.

Admission Requirements:

Applicant to the MAT program must submit the following information to the Office of Admissions for review:

- Completed [online](#) application - resume and essay can be uploaded to the application but can also be sent independently
- Official Transcripts (must be sent from the school's Registrar's Office) from **all** colleges and universities you have attended including those in which you may **have transfer credits**
- Curriculum Vitae or Resume
- Two (2) Academic or Professional Letters of Recommendation
- Admissions Essay - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?

Admission Process

After verifying that the minimum academic requirements are met, the program utilizes a holistic approach in reviewing the candidate's entire application. This process is intended to seek talented and qualified individuals of all backgrounds. Taking multiple factors into consideration during our admissions process positively achieves the educational benefits of a student body that is both diverse and academically excellent. This approach includes an evaluation of each candidate's academic achievement as well as their personal characteristics, attributes and experiences. As part of the holistic review, Chatham reserves the right to request a background check prior to offer of admission.

Applicants will be informed by the Office of Admissions about whether or not they have been accepted into the MAT program.

PDE Clearances

The Pennsylvania Department of Education requires all individuals who interact with children in Pennsylvania schools to obtain three types of clearances: Act 34(PA Criminal), Act 151(Child Abuse), and FBI Criminal History Report. Form PDE 6004 also must be completed for any person entering a school. These are required for all Chatham field placements including observations and student teaching. In all MAT programs, field placements begin in the first term of enrollment. Therefore, students must submit these three clearances and form PDE 6004 to the Field Placement Coordinator located in Braun 204. Negative information on any of these clearances may be cause for dismissal from the program.

More information regarding these clearances is available on the [Pennsylvania Department of Education](#) website.

International Applicants

International Applicants to the MA in Teaching program must submit additional documentation to the Office

of Admissions.

A list of these documents can be found on the [International Admission](#) web pages.

Please note that only international applicants that have a TOEFL score of 100 and can meet the clearance and PDE requirements will be admitted into the program.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Curriculum

Grades PreK-4

52 credits, including:

EDU502	Perspectives on Education This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major research project that addresses a current educational issue. Co-Requisite: EDU580	2 credits
EDU508	Games Children Play A range of games and activities are explored in terms of functional movements and progression towards mature forms of selected physical skills. Healthy warm-up and participation strategies will be part of the exploration of each game. Games will be analyzed in terms of developmental appropriateness and the involvement of certain muscle groups and skill requirements. Students design an original game targeting the development of age-specific skills.	1 credits
EDU509	Trends and Issues in Early Childhood Education Trends and Issues in Early Childhood Education	3 credits
EDU510	Differentiated Reading and Writing This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.	3 credits

EDU511	Early Elementary Curriculum Students explore the teaching of all content areas in the early childhood setting. Students experience using a computer as a teaching tool, and examine and evaluate instructional software. A capstone research paper or project will demonstrate theory-based best practices to develop a curriculum for use in the early childhood classroom. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • EDU502 Perspectives on Education Co-requisites <ul style="list-style-type: none"> • EDU607 Child Development and Learning Theory • EDU609 Literacy 	3 credits
EDU514	Data Driven Instructional Decisions The importance of making decisions based on actual data collected on students now plays a major role in all schools. Data review goes beyond standardized test results and includes summative and formative assessment results. The connection between curriculum and assessments assessing a student's progress needs to be viewed as a guide to effective educational decision making.	2 credits
EDU530	Diverse Family and Community Partnerships Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.	3 credits
EDU534	Methods of Teaching Elementary Social Studies This course is designed to provide students with the knowledge and tools needed to be effective elementary social studies teachers. Students will learn strategies that allow for diverse learners to "experience" social studies, and to integrate social studies with all other subject areas. In this course, together we will attempt to establish a "social curriculum" that starts with the social studies, includes all academic areas, and expands into the halls, the playground, and into the world.	2 credits
EDU535	Methods of Teaching Elementary Mathematics This course explores recent research developments of national reform efforts in teaching mathematics. Students explore the teaching of mathematics within the context of child development and learning theory. Research-based curriculum projects promote deep conceptual understanding in mathematics. Review of specific topics in math to increase the student's own competencies is included. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • EDU502 Perspectives on Education • EDU607 Child Development and Learning Theory 	3 credits

EDU536	Methods of Teaching Elementary Science	2 credits
	<p>This course explores recent developments of national reform efforts in teaching science based on developmental and learning theory. Students will learn hands-on innovative classroom practices and review national and state standards for science education. Methods for increasing content knowledge related to schedule and technology will be explored.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 Perspectives on Education 	
EDU607	Child Development and Learning Theory	3 credits
	<p>Focusing on child development from the prenatal stage to age 12, this course emphasizes current research on physical, cognitive, and social development. Students examine the nature of adolescent development, implications of the cognitive and affective characteristics of adolescents in the selection of instructional methods and materials, and structural and organizational features of typical high schools.</p>	
EDU609	Literacy	3 credits
	<p>The interrelationships among listening, speaking, writing, and reading are investigated with a view toward emphasis on the impact that classroom organization, patterns, materials, and approaches have on teacher effectiveness in teaching elementary and early childhood-aged students, individually and in groups. Students are required to complete a major research paper or project in which they demonstrate knowledge of and skill in using teaching strategies that reinforce the theoretical considerations of the course.</p>	
EDU634	Inclusion: Issues and Strategies	3 credits
	<p>This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of its implementation. Students participate in a variety of learning experiences throughout the course.</p>	
EDU639	Integrating the Arts	3 credits
	<p>This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of content areas in the elementary curriculum. Students examine national and the PA Academic Standards for the Arts and Humanities in Art, Music, Theater and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.</p>	
EDU657	ELL Teaching Strategies for Classroom Teachers	3 credits
	<p>This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.</p>	

EDU696	Student Teaching	9 credits
<p>During one 8 week elementary and one 8 week secondary placement, student teachers will plan and implement lessons, and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college professor. Students develop a portfolio based on the PDE form 430 to document their competencies for certification. Pre-requisites: Completion of all program requirements.</p>		
EDU664	Behavior Management in the Classroom	3 credits
<p>Students investigate the principles and systematic approaches used to identify and analyze problem management techniques, individual behavior and affective intervention strategies, and community-based support programs designed to address problem behaviors. Crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors.</p>		
EDU580	Supervised Field III Experience	0 credits
<p>This field placement offers the student the opportunity to experience and assess the culture of a school. Daily interactions among teachers, students, administration, and support staff in a unique physical setting provide the pre-service teacher with a comprehensive overview of school life.</p>		
EDU581	Pedagogical Practices	1 credits
<p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is experienced throughout the course.</p>		

Secondary

(biology, chemistry, English, mathematics, physics or social studies) 44 credits, including:

EDU502	Perspectives on Education	2 credits
<p>This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major research project that addresses a current educational issue. Co-Requisite: EDU580</p>		
EDU510	Differentiated Reading and Writing	3 credits
<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.</p>		

EDU515 Secondary School Curriculum 3 credits

Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.

EDU516 Methods of Teaching Secondary English 3 credits

This course addresses the theory and philosophy of teaching language arts in middle and secondary schools. Classroom teaching strategies are explored and implemented in class presentation and in 7-12 public classrooms. Students plan instructional situations that clearly express the reading-writing connection that exists in effective language arts programs. Co-Requisites: EDU515 and EDU581

OR

EDU517 Teaching Methods in Secondary Social Studies 3 credits

This course develops research-based strategies for teaching social studies. Contextual teaching, problem-based learning, and critical thinking are approached through instructional strategies that combine investigative classroom inquiry with both national and state context standards. Students learn to frame issues, help students research and analyze data and information to construct meaning and understanding. Co-Requisites: EDU515 and EDU581

Co-requisites

- EDU515 Secondary School Curriculum
- EDU581 Pedagogical Practices

OR

EDU518 Methods of Teaching Secondary Science 3 credits

Examination of current theory and practice for teaching science in secondary schools is explored in this course. Curriculum development, teaching strategies and methodologies, and assessment issues are also addressed. Students examine research-based curriculum and inquiry teaching and learning as best practices in science education. Co-Requisites: EDU515 and EDU581

Pre-requisites Complete all 2 of the following courses:

- EDU515 Secondary School Curriculum
- EDU581 Pedagogical Practices

OR

EDU514	Data Driven Instructional Decisions	2 credits
	The importance of making decisions based on actual data collected on students now plays a major role in all schools. Data review goes beyond standardized test results and includes summative and formative assessment results. The connection between curriculum and assessments assessing a student's progress needs to be viewed as a guide to effective educational decision making.	
EDU530	Diverse Family and Community Partnerships	3 credits
	Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.	
EDU605	Instructing Students With Autism Spectrum Disorders	3 credits
	This course is designed to focus on pertinent issues and topics that concern students with autism. Spectrum disorders. This course provides an overview of evidenced-based instructional strategies used to teach students with autism as well as ways to collaborate with individuals in the home, school, and community. Topics will cover specific instructional strategies, family/community relations, behavior, inclusion and transition.	
EDU634	Inclusion: Issues and Strategies	3 credits
	This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of its implementation. Students participate in a variety of learning experiences throughout the course.	
EDU657	ELL Teaching Strategies for Classroom Teachers	3 credits
	This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.	
EDU696	Student Teaching	9 credits
	During one 8 week elementary and one 8 week secondary placement, student teachers will plan and implement lessons, and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college professor. Students develop a portfolio based on the PDE form 430 to document their competencies for certification. Pre-requisites: Completion of all program requirements.	

EDU664	Behavior Management in the Classroom	3 credits
	Students investigate the principles and systematic approaches used to identify and analyze problem management techniques, individual behavior and affective intervention strategies, and community-based support programs designed to address problem behaviors. Crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors.	
EDU581	Pedagogical Practices	1 credits
	This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is experienced throughout the course.	
EDU505	Issues of Poverty in Education	3 credits
	This course focuses on the characteristics and effects of poverty on education. Definitions and types of poverty are examined. The impact of poverty on cognitive and physical development as well as learning and behavior on individuals is examined. The influences of poverty on classroom and schools is assessed. Strategies to teach students of poverty and combat poverty in schools are discussed.	
EDU583	Conflict Resolution	1 credits
	This course teaches students how to avoid conflicts from developing and explores methods to resolve conflict. This course also defines and presents a mediation process that employs a specific set of techniques that enables students to peacefully resolve conflict. Students taking this course will learn to manage conflict in their personal life, classroom, and in the workplace.	
EDU524	Teaching in a Urban Schools	2 credits
	This course helps future teachers understand the complexities of teaching in a culturally diverse classroom. Students learn how to work effectively with students from various socioeconomic, religious, ethnic, and cultural groups. Students complete a major research project reflecting an understanding of best practices in effectively developing multicultural learning communities.	
	Pre-requisites Complete the following course:	
	• EDU502 Perspectives on Education	

Art Education K-12

Programs in these areas require some coursework in both elementary and secondary education. Candidates for these degrees should contact the certification officer or program chairperson. 43 credits, including:

EDU502	Perspectives on Education	2 credits
	This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major research project that addresses a current educational issue. Co-Requisite: EDU580	
EDU510	Differentiated Reading and Writing	3 credits
	This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.	
EDU514	Data Driven Instructional Decisions	2 credits
	The importance of making decisions based on actual data collected on students now plays a major role in all schools. Data review goes beyond standardized test results and includes summative and formative assessment results. The connection between curriculum and assessments assessing a student's progress needs to be viewed as a guide to effective educational decision making.	
EDU515	Secondary School Curriculum	3 credits
	Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.	
EDU530	Diverse Family and Community Partnerships	3 credits
	Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.	
EDU531	Assessment and Adaptation	3 credits
	Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.	
EDU537	Methods of Teaching Elementary Art	3 credits
	Students approach the teaching of art consistent with national standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to elementary school children. This course contains an embedded field experience of 16 hours in an elementary art classroom.	

EDU547	Methods of Teaching Secondary Art	3 credits
	<p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course approaches the teaching of art in the secondary school as a means of exploring the meaning and relevance of art to humanity. This course explores methods for engaging students in art experiences through a variety of teaching. This course contains an embedded field experience of 16 hours in a secondary art classroom.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 Perspectives on Education 	
EDU607	Child Development and Learning Theory	3 credits
	<p>Focusing on child development from the prenatal stage to age 12, this course emphasizes current research on physical, cognitive, and social development. Students examine the nature of adolescent development, implications of the cognitive and affective characteristics of adolescents in the selection of instructional methods and materials, and structural and organizational features of typical high schools.</p>	
EDU634	Inclusion: Issues and Strategies	3 credits
	<p>This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of its implementation. Students participate in a variety of learning experiences throughout the course.</p>	
EDU639	Integrating the Arts	3 credits
	<p>This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of content areas in the elementary curriculum. Students examine national and the PA Academic Standards for the Arts and Humanities in Art, Music, Theater and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.</p>	
EDU657	ELL Teaching Strategies for Classroom Teachers	3 credits
	<p>This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.</p>	
EDU696	Student Teaching	9 credits
	<p>During one 8 week elementary and one 8 week secondary placement, student teachers will plan and implement lessons, and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college professor. Students develop a portfolio based on the PDE form 430 to document their competencies for certification. Pre-requisites: Completion of all program requirements.</p>	

Middle Level

English, Math, Science, Social Studies concentration - 44 credits, including:

EDU502	Perspectives on Education	2 credits
<p>This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major research project that addresses a current educational issue. Co-Requisite: EDU580</p>		
EDU503	Young Adolescent Literature	2 credits
<p>In this course students explore and develop in-depth knowledge of children's literature and its integration into the early childhood or elementary curricula. Students are required to complete a major project using technology and the arts that reflects effective pedagogy.</p>		
EDU510	Differentiated Reading and Writing	3 credits
<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.</p>		
EDU514	Data Driven Instructional Decisions	2 credits
<p>The importance of making decisions based on actual data collected on students now plays a major role in all schools. Data review goes beyond standardized test results and includes summative and formative assessment results. The connection between curriculum and assessments assessing a student's progress needs to be viewed as a guide to effective educational decision making.</p>		
EDU515	Secondary School Curriculum	3 credits
<p>Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.</p>		
EDU524	Teaching in a Urban Schools	2 credits
<p>This course helps future teachers understand the complexities of teaching in a culturally diverse classroom. Students learn how to work effectively with students from various socioeconomic, religious, ethnic, and cultural groups. Students complete a major research project reflecting an understanding of best practices in effectively developing multicultural learning communities.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• EDU502 Perspectives on Education		

EDU526	Integrated Humanities Methods	2 credits
	<p>This course addresses theory and practice in teaching secondary school students to read and communicate effectively in the content area. The course provides strategies for teaching reading, listening, speaking, and writing in the secondary classroom. A research paper or project demonstrating mastery of content area literacy is required.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 Perspectives on Education 	
EDU528	Integrated Math and Science Methods	2 credits
	<p>The purpose of this course is to provide pre-service teachers with experiences, understanding, and methods that they will be able to use in middle level mathematics and science classrooms. Students in this course will build an understanding of the relevant standards, instructional methods, and resources available for the middle level mathematics and science class.</p>	
EDU530	Diverse Family and Community Partnerships	3 credits
	<p>Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.</p>	
EDU580	Supervised Field III Experience	0 credits
	<p>This field placement offers the student the opportunity to experience and assess the culture of a school. Daily interactions among teachers, students, administration, and support staff in a unique physical setting provide the pre-service teacher with a comprehensive overview of school life.</p>	
EDU606	Adolescent Development and Learning Theory	3 credits
	<p>This course addresses physical, social, cognitive, and moral development during adolescence. The physical, social, and cognitive changes during puberty are explored in terms of their impact on student participation and performance in school settings. Through the use of case studies, an understanding of the implications of growth and development on instructional planning for effective learning is achieved.</p>	
EDU609	Literacy	3 credits
	<p>The interrelationships among listening, speaking, writing, and reading are investigated with a view toward emphasis on the impact that classroom organization, patterns, materials, and approaches have on teacher effectiveness in teaching elementary and early childhood-aged students, individually and in groups. Students are required to complete a major research paper or project in which they demonstrate knowledge of and skill in using teaching strategies that reinforce the theoretical considerations of the course.</p>	

EDU618	Instructional Computer Integration	2 credits
	<p>This course helps students develop competency integrating computer technology with the school curriculum. It provides a practical introduction to using computers to help students learn emerging instructional technologies. Special emphasis is on the process and products available through computer technology and educational media. Students prepare an instructional unit integrating a variety of technologies.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 Perspectives on Education 	
EDU634	Inclusion: Issues and Strategies	3 credits
	<p>This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of its implementation. Students participate in a variety of learning experiences throughout the course.</p>	
EDU657	ELL Teaching Strategies for Classroom Teachers	3 credits
	<p>This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.</p>	
EDU673	Instructional Personalization and Transition	2 credits
	<p>This course focuses on the transition of special needs students throughout their school programming. The following topics are examined: parent's needs and methods of collaborating, Early Childhood Intervention, Inclusion, Sexuality and Transition to Adult Life.</p>	
EDU694	Student Teaching for the Urban Fellow	3 credits
	<p>During the 14 week pre-K-6 placement, student teachers will plan and implement lessons and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college supervisor. Students develop a portfolio based on the PDE Form 430 to document their competencies for certification.</p>	
EDU664	Behavior Management in the Classroom	3 credits
	<p>Students investigate the principles and systematic approaches used to identify and analyze problem management techniques, individual behavior and affective intervention strategies, and community-based support programs designed to address problem behaviors. Crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors.</p>	

EDU581 Pedagogical Practices**1 credits**

This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is experienced throughout the course.

2022-2023 Course Catalog

Master of Business Administration (MBA)

The Chatham MBA consists of 36 credits separated into three parts:

- Eight (8) core courses which provide students with detailed coverage of the advanced business knowledge and critical skills that are most in demand by employers (24 credits)
- Three (3) courses associated with the concentrations (9 credits)
- A challenging business consulting project in the MBA capstone (3 credits)

Admission Requirements

Admission Deadlines

- Fall Recommended Deadline - July 1*
- *Rolling admission for Fall entry until August 1
- Spring Recommended Deadline - November 1

Application Requirements

Applicants to the MBA program must submit the following information to the Office of Admissions for review:

- Completed [online](#) application
- Official transcripts from [all](#) colleges and universities attended
- Resume

Admissions Materials may be submitted to:

Chatham University

Office of Graduate Admission

Woodland Road

Pittsburgh, PA 15232

Fax: (412) 365-1609

Email: graduate@chatham.edu

International Applicants

International Applicants to the MBA program must submit additional documentation to the Office of Admissions.

A list of these documents can be found on the [International Admission](#) web pages.

Pre-requisites

- A baccalaureate degree from an accredited college or university
- Minimum of a 3.0 GPA

- Business Statistics
- Financial Accounting
- Proficiency in MS Excel
- *If admitted, you can take these courses before the start or in conjunction with the start of the MBA program.

Admission Process

After verifying that the minimum academic requirements are met, the program utilizes a holistic approach in reviewing the candidate's entire application. This process is intended to seek talented and qualified individuals of all backgrounds. Taking multiple factors into consideration during our admissions process positively achieves the educational benefits of a student body that is both diverse and academically excellent. This approach includes an evaluation of each candidate's academic achievement as well as their personal characteristics, attributes and experiences.

Applicants will be informed by the Office of Admissions about whether or not they have been accepted into the MBA program.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

In master's level programs, knowledge of the key content areas of business is assumed. Students without previous business courses take the Prerequisite Courses. Graduates of master's level programs should acquire a depth of knowledge in these areas that exceeds that of the typical bachelor's degree graduate. Graduates of the MBA program should be able to demonstrate that they possess business-specific content outcomes and business-related professional skills outcomes.

Graduates of the MBA program will be able to:

1. Communicate professionally as a business leader both orally and in writing to bridge diverse perspectives, cultures, and disciplines
2. Analyze ethical implications of business practices using advanced levels of ethical reasoning
3. Perform strategic analysis effectively
4. Apply quantitative methods to business problem solving
5. Assess global opportunities and challenges for business growth
6. Collaborate effectively as a business leader
7. In-depth Knowledge for specific MBA concentrations:
 - Entrepreneurial Leadership and Strategy- Demonstrate knowledge, skills and techniques to lead entrepreneurial and strategic ventures
 - Healthcare Management- Demonstrate knowledge, skills and techniques to manage healthcare

- operations effectively and efficiently
- Project Management- Demonstrate knowledge, skills and techniques to execute projects effectively and efficiently
- Supply Chain Management- Demonstrate knowledge, skills and techniques to manage supply chain operations effectively and efficiently
- Sustainability- Demonstrate knowledge, skills and techniques to lead sustainable businesses and organizations

Curriculum

Accounting Track

27 Required Credits + 9 Elective Credits

Required

BUS570	Global Business	3 credits
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This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.

BUS576	Sustainable Human Capital	3 credits
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Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.

BUS577	Information Systems and Analytics	3 credits
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This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.

OR

ACT580 Accounting Information Systems **3 credits**

This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.

BUS618 Economics for Managers **3 credits**

This course teaches how economic tools and techniques can be used to solve business problems. Economics describes why firms do what they do and points to business strategies. The course focuses on economic applications. The course provides an understanding of how economics influences marketing, management, and other business-related decisions.

BUS652 Managerial Accounting **3 credits**

This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.

OR

ACT625 Cost Analysis **3 credits**

Cost Analysis introduces students to the role cost considerations play in management decision making. Topics include the classification and allocation of costs, job order and process costing, standard costs, budgeting and planning, cost-volume-profit analysis, and using costs as performance measurements.

BUS671 Marketing Management **3 credits**

This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.

BUS672	Corporate Finance	3 credits
<p>This course deepens an understanding of financial analysis tools and concepts. Students will learn how and when to use the financial-analytical tools required to make effective business and policy decision. Functional areas addressed are assessing financial health, planning financial performance, interpretation of data and recommendations, supply-chain management.</p>		
BUS698	Strategy and Entrepreneurship	3 credits
<p>"Develop strategies to gain and sustain competitive advantage. Examine the goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. Develop and implement strategy across industries, and as an entrepreneur, through case analyses and simulations. "</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS671 Marketing Management 		
BUS699	Business Consulting Capstone	3 credits
<p>This course is the culminating experience in the MBA program. Students apply professional-level business consulting skills learned in the MBA program. Business Consulting Capstone student teams solve business problems for businesses and entrepreneurs.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS672 Corporate Finance • BUS698 Strategy and Entrepreneurship 		
<p>Electives (select 3 of the 4 listed for a total of 9 credits)</p>		
ACT512	Auditing	3 credits
<p>This course engages the student in a comprehensive study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.</p>		
ACT620	Advanced Financial Accounting	3 credits
<p>This course introduces the student to many advanced financial accounting issues. Includes the application of GAAP rules for consolidation of inter-corporate acquisitions and investments in other entities, multi-national accounting issues involving foreign currency transactions and translation of foreign entity statements, accounting for partnerships, and segment and interim reporting requirements.</p>		

ACT630	Advanced Tax Accounting	3 credits
<p>This course is designed to introduce students to advanced strategies in taxation. The course's focus is upon how tax research is performed and the basic concepts underlying the strategic tax planning. Tax issues associated with new businesses, business operation, growth, expansion, termination, and liquidations and estate planning are examined.</p>		
ACT540	Government and Non-Profit Accounting	3 credits
<p>This course's focus is upon the principles of fund accounting and the financial reporting, budgeting and auditing of both public and private not-for-profit organizations. Particular attention is given to accounting procedures for the activities of state and local governments, but the course also considers other not-for-profit entities.</p>		
ACT699	Forensic Accounting	3 credits
<p>Focuses on preventing, detecting, and investigating common types of internal and external fraud. Designed to cultivate advanced understanding methods of analysis of financial crime allegations. Provides the culminating experience of Chatham University's MAcc program. Should be one of the last courses taken in the MAcc Program.</p> <p>Pre-requisites Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • ACT573 Business Law and Ethics • ACT620 Advanced Financial Accounting • ACT630 Advanced Tax Accounting 		

Degree Requirements

Proficiency in written and oral communications, college level math, and computer usage, including word processing, spread sheets, databases, and the Internet, are required. Basic knowledge of statistics, accounting, and Excel are essential. Students without previous business coursework or life experience in these areas must complete competency coursework. Consult with the admissions counselor about how to meet these competencies.

Core Requirements

The MBA consists of a Core of 9 courses (27 credit hours) and the requirements of one specific concentration (Entrepreneurial Leadership and Strategy, Food and Agriculture, Healthcare Management, Information Management, Project Management, Supply Chain Management, Sustainability, or Self-Designed Concentration). Students should declare their Concentration as they enter the program.

(9 required courses - 27 credit hours are required in all six concentrations)

BUS570	Global Business	3 credits
<p>This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion,</p>		

and career planning.

BUS576	Sustainable Human Capital	3 credits
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Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.

BUS577	Information Systems and Analytics	3 credits
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This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.

OR

ACT580	Accounting Information Systems	3 credits
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This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.

BUS618	Economics for Managers	3 credits
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This course teaches how economic tools and techniques can be used to solve business problems. Economics describes why firms do what they do and points to business strategies. The course focuses on economic applications. The course provides an understanding of how economics influences marketing, management, and other business-related decisions.

BUS652	Managerial Accounting	3 credits
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This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.

OR

ACT625	Cost Analysis	3 credits
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Cost Analysis introduces students to the role cost considerations play in management decision making. Topics include the classification and allocation of costs, job order and process costing, standard costs, budgeting and planning, cost-volume-profit analysis, and using costs as performance measurements.

BUS671	Marketing Management	3 credits
	This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.	
BUS672	Corporate Finance	3 credits
	This course deepens an understanding of financial analysis tools and concepts. Students will learn how and when to use the financial-analytical tools required to make effective business and policy decision. Functional areas addressed are assessing financial health, planning financial performance, interpretation of data and recommendations, supply-chain management.	
BUS698	Strategy and Entrepreneurship	3 credits
	"Develop strategies to gain and sustain competitive advantage. Examine the goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. Develop and implement strategy across industries, and as an entrepreneur, through case analyses and simulations. "	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • BUS671 Marketing Management 	
BUS699	Business Consulting Capstone	3 credits
	This course is the culminating experience in the MBA program. Students apply professional-level business consulting skills learned in the MBA program. Business Consulting Capstone student teams solve business problems for businesses and entrepreneurs.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • BUS672 Corporate Finance • BUS698 Strategy and Entrepreneurship 	

Entrepreneurial Leadership and Strategy Concentration

9 credits

BUS550	Innovation and Commercialization	3 credits
	This course focuses on how to successfully commercialize an innovation. Understanding commercialization activities such as pre-product launch planning, market testing, actual product launch, and post-launch follow-up is a major part of the course. The course provides a run-through of the complete cycle from idea to market entry.	

BUS575	Leading Organizations and Projects	3 credits
<p>The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.</p>		
BUS623	Strategic Performance for Executives	3 credits
<p>This course will cover issues specific to business leaders such as conflict management, negotiation and persuasion, mentoring structures, crisis communication, and organizational change. Other topics will include implicit and explicit attitude toward authority in the workplace; implicit social cognition; attitudes, self-esteem, and stereotypes, etc.</p>		

Food and Agriculture Concentration

Food and agriculture are critical industries that present unique challenges and opportunities. Specialized expertise in food and agriculture prepares MBA students for leadership positions as well as entrepreneurial ventures in both public and private sectors. Food and agriculture organizations need MBA-educated professionals to help them make strategic decisions, innovate, and grow, while creating value for the wellbeing of people, animals, plants, in addition to shareholders. Chatham's MBA concentration on Food and Agriculture develops future professionals in the food and agriculture industries with a practical, application-focused education in collaboration with Chatham's Food Studies Program of its world-renowned Falk School of Sustainability. Students in the Food and Agriculture concentration gain theoretical understanding and hands-on experience with food and agriculture systems, innovations, and regulations. Elective classes may take place at the Eden Hall Campus, Shadyside Campus, evening, online or during the day on weekdays.

Elective options (9 credits)

FST502	Essential Readings in Food and Agriculture	1 credits
<p>This class provides grounding in essential texts in the contemporary understanding of food and agriculture. Readings include key food histories, journalism, critical nutrition and food industry writers, and agriculture and environmental treatise. Class will meet monthly to analyze texts. Students will contribute to forum and blog discussions throughout the year.</p>		
FST508	Food Systems	3 credits
<p>Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering the relationship between communities, agriculture, markets, and consumers.</p>		

FST518	Business of Food and Agriculture	3 credits
<p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 		
FST520	Basic Agroecology	3 credits
<p>Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>		
FST522	GIS: Food and Agriculture	3 credits
<p>This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.</p>		
FST531	Sustainable Fermentation	3 credits
<p>Through hands-on production, tastings, lectures, students learn basics of fermentation, winemaking principles and practices, sensory evaluation through tastings, viticulture history, wine regions and types, winemaking methods, chemistry and winery operations. Local production includes root beer, beer, sake, local mead and vinegar. Emphasis will be on sustainable viniculture practices and local/global links.</p>		
FST624	Chocolate: Politics and Pleasure	3 credits
<p>This course will explore chocolate as a global product including history and culture, agriculture (growing trees, processing beans), direct/fair trade, labor and justice, health, chocolate production, sales, marketing, and sustainability. Experiential components include chocolate making, tempering; culinary practices, and site visits to chocolate manufacturers, culminating in the design and marketing of a sustainable chocolate product.</p>		
FST532	Sustainable Meat Production	3 credits
<p>As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.</p>		

FST683	Special Topics Special Topics	3 credits
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Healthcare Management Concentration

9 credits online

BUS511	Health Policy & Advocacy Analyze and synthesize innovative approaches to issues in health care delivery at all levels. Politics, policy, market forces, and advocacy are used to assess how system approaches affect health care delivery. Transformational leadership for political and policy activism are emphasized, while exploring regional, national, and global health issues and trends.	3 credits
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BUS551	Informatics in Healthcare This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.	3 credits
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COM510	Health Communications Course provides an introduction to the essential concepts and theories of health communication. Students study how individuals understand health issues and how communication processes help shape and influence our acceptance of health-related messages. Topics include health literacy, media coverage of health issues, and health risk communications.	3 credits
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Information Management Concentration

4 Concentration Courses. 12 credits

ACT580	Accounting Information Systems This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.	3 credits
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BUS551	Informatics in Healthcare This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.	3 credits
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BUS582	Foundations of Project Management	3 credits
	This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.	
PWR670	Principles of Information Architecture	3 credits
	In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • PWR601 Introduction to Professional Writing 	
PWR673	Web Design and Development I	3 credits
	This course will provide an introduction to the technical skills needed for designing on-line content and interactive multimedia. Current multimedia tools for use in creating web-based products will be taught with ample opportunity for practice. Students learn authoring tools and multimedia techniques while covering topics, including non-text-based communication, integration of visuals, the animation of text and graphics, and digital video web-deployment.	
PWR674	Web Design and Development II	3 credits
	A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.	

Project Management Concentration

9 credits

BUS575	Leading Organizations and Projects	3 credits
	The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.	
BUS582	Foundations of Project Management	3 credits
	This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.	

BUS680	Complex Issues in Project Management	3 credits
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Case studies and simulations engage students in the examination of complex issues in project management, such as control, portfolio management, and rescuing failing projects. The Student will be able to analyze, evaluate, and optimize projects in specific environments and industries.

Pre-requisites Complete the following course:

- BUS582 Foundations of Project Management

Supply Chain Management Concentration

9 credits

BUS513	Logistics and Operations	3 credits
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This course introduces students to technical tools and skills essential for problem solving and decision-making in logistics and operations management. Topics may include inventory optimization, network planning, demand forecasting, transportation planning, and productions planning. Mastery of quantitative methods using spreadsheet modeling is required for all students.

BUS562	Global Procurement	3 credits
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In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.

BUS641	Sustainable Supply Chain Management	3 credits
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This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.

Sustainability Concentration

9 credits

BUS639	Sustainability and Assessment Reporting	3 credits
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An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.

BUS641	Sustainable Supply Chain Management	3 credits
<p>This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.</p>		
SUS580	Sustainable Behavior Change	3 credits
<p>This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.</p>		

Self-Designed Concentration

Choose 9 credits

ACT540	Government and Non-Profit Accounting	3 credits
<p>This course's focus is upon the principles of fund accounting and the financial reporting, budgeting and auditing of both public and private not-for-profit organizations. Particular attention is given to accounting procedures for the activities of state and local governments, but the course also considers other not-for-profit entities.</p>		
ACT545	Accounting Theory	3 credits
<p>This course encourages students to take a conceptual view of accounting, urging them to get beyond the process and to grasp the reasoning behind the accounting procedures. The focus is upon what it means for accounting to be a source of information and providing a framework for evaluating accounting alternatives.</p>		
ACT573	Business Law and Ethics	3 credits
<p>This course provides students with a broad-based understanding of legal issues that affect modern businesses. The course covers the following substantive law areas: Choice of Entity, Corporate Governance, Raising Money, Securities Regulation, Bankruptcy, Contracts, Intellectual Property and Employment Law.</p>		
ACT580	Accounting Information Systems	3 credits
<p>This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.</p>		

ACT625	Cost Analysis	3 credits
	Cost Analysis introduces students to the role cost considerations play in management decision making. Topics include the classification and allocation of costs, job order and process costing, standard costs, budgeting and planning, cost-volume-profit analysis, and using costs as performance measurements.	
ACT620	Advanced Financial Accounting	3 credits
	This course introduces the student to many advanced financial accounting issues. Includes the application of GAAP rules for consolidation of inter-corporate acquisitions and investments in other entities, multi-national accounting issues involving foreign currency transactions and translation of foreign entity statements, accounting for partnerships, and segment and interim reporting requirements.	
ACT630	Advanced Tax Accounting	3 credits
	This course is designed to introduce students to advanced strategies in taxation. The course's focus is upon how tax research is performed and the basic concepts underlying the strategic tax planning. Tax issues associated with new businesses, business operation, growth, expansion, termination, and liquidations and estate planning are examined.	
ACT699	Forensic Accounting	3 credits
	Focuses on preventing, detecting, and investigating common types of internal and external fraud. Designed to cultivate advanced understanding methods of analysis of financial crime allegations. Provides the culminating experience of Chatham University's MAcc program. Should be one of the last courses taken in the MAcc Program.	
	Pre-requisites Complete all 3 of the following courses:	
	<ul style="list-style-type: none"> • ACT573 Business Law and Ethics • ACT620 Advanced Financial Accounting • ACT630 Advanced Tax Accounting 	
BUS511	Health Policy & Advocacy	3 credits
	Analyze and synthesize innovative approaches to issues in health care delivery at all levels. Politics, policy, market forces, and advocacy are used to assess how system approaches affect health care delivery. Transformational leadership for political and policy activism are emphasized, while exploring regional, national, and global health issues and trends.	
BUS513	Logistics and Operations	3 credits
	This course introduces students to technical tools and skills essential for problem solving and decision-making in logistics and operations management. Topics may include inventory optimization, network planning, demand forecasting, transportation planning, and productions planning. Mastery of quantitative methods using spreadsheet modeling is required for all students.	

BUS550	Innovation and Commercialization This course focuses on how to successfully commercialize an innovation. Understanding commercialization activities such as pre-product launch planning, market testing, actual product launch, and post-launch follow-up is a major part of the course. The course provides a run-through of the complete cycle from idea to market entry.	3 credits
BUS551	Informatics in Healthcare This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.	3 credits
BUS552	Managing Non-Profit Organizations Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.	3 credits
BUS562	Global Procurement In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.	3 credits
BUS575	Leading Organizations and Projects The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.	3 credits
BUS582	Foundations of Project Management This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.	3 credits
BUS623	Strategic Performance for Executives This course will cover issues specific to business leaders such as conflict management, negotiation and persuasion, mentoring structures, crisis communication, and organizational change. Other topics will include implicit and explicit attitude toward authority in the workplace; implicit social cognition; attitudes, self-esteem, and stereotypes, etc.	3 credits

BUS639	Sustainability and Assessment Reporting	3 credits
	An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.	
BUS641	Sustainable Supply Chain Management	3 credits
	This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.	
BUS680	Complex Issues in Project Management	3 credits
	Case studies and simulations engage students in the examination of complex issues in project management, such as control, portfolio management, and rescuing failing projects. The Student will be able to analyze, evaluate, and optimize projects in specific environments and industries.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • BUS582 Foundations of Project Management 	
COM510	Health Communications	3 credits
	Course provides an introduction to the essential concepts and theories of health communication. Students study how individuals understand health issues and how communication processes help shape and influence our acceptance of health-related messages. Topics include health literacy, media coverage of health issues, and health risk communications.	
FST502	Essential Readings in Food and Agriculture	1 credits
	This class provides grounding in essential texts in the contemporary understanding of food and agriculture. Readings include key food histories, journalism, critical nutrition and food industry writers, and agriculture and environmental treatise. Class will meet monthly to analyze texts. Students will contribute to forum and blog discussions throughout the year.	
FST508	Food Systems	3 credits
	Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering the relationship between communities, agriculture, markets, and consumers.	

FST518	<p>Business of Food and Agriculture</p> <p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	3 credits
FST520	<p>Basic Agroecology</p> <p>Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	3 credits
FST522	<p>GIS: Food and Agriculture</p> <p>This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.</p>	3 credits
FST531	<p>Sustainable Fermentation</p> <p>Through hands-on production, tastings, lectures, students learn basics of fermentation, winemaking principles and practices, sensory evaluation through tastings, viticulture history, wine regions and types, winemaking methods, chemistry and winery operations. Local production includes root beer, beer, sake, local mead and vinegar. Emphasis will be on sustainable viniculture practices and local/global links.</p>	3 credits
FST624	<p>Chocolate: Politics and Pleasure</p> <p>This course will explore chocolate as a global product including history and culture, agriculture (growing trees, processing beans), direct/fair trade, labor and justice, health, chocolate production, sales, marketing, and sustainability. Experiential components include chocolate making, tempering; culinary practices, and site visits to chocolate manufacturers, culminating in the design and marketing of a sustainable chocolate product.</p>	3 credits
FST532	<p>Sustainable Meat Production</p> <p>As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.</p>	3 credits

FST683	Special Topics Special Topics	3 credits
PWR670	Principles of Information Architecture In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools. Pre-requisites Complete the following course: • PWR601 Introduction to Professional Writing	3 credits
PWR673	Web Design and Development I This course will provide an introduction to the technical skills needed for designing on-line content and interactive multimedia. Current multimedia tools for use in creating web-based products will be taught with ample opportunity for practice. Students learn authoring tools and multimedia techniques while covering topics, including non-text-based communication, integration of visuals, the animation of text and graphics, and digital video web-deployment.	3 credits
PWR674	Web Design and Development II A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.	3 credits
SUS580	Sustainable Behavior Change This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	3 credits

2022-2023 Course Catalog

Master of Education in Educational Instructional Studies (M.Ed)

The M.Ed. in Education Instructional Studies is designed for people who desire to work in non-certified fields in education related jobs and for current teachers who wish to gain expertise in education. The program provides a foundation in the history of education in the United States, types of schools and school systems, learning theory and development, and inclusive practices. Further, it teaches people how to incorporate evidence based practices to teach diverse learners and also collaborate with diverse families and communities.

The Educational Instructional Studies program is a 34-credit, four semester program. The program consists of on ground, hybrid and online courses and is designed for a working professional. All on ground, in seat classes meet in the evenings. The first semester of the program introduces students to the foundations of American education, development and learning theory, special education, and culturally diverse learners. Each semester thereafter, students learn evidence based practices to hone in on skills to work with diverse learners and to collaborate with families and communities.

Curriculum

Major Requirements

EDU502	Perspectives on Education	2 credits
This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major research project that addresses a current educational issue. Co-Requisite: EDU580		
EDU634	Inclusion: Issues and Strategies	3 credits
This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of it implementation. Students participate in a variety of learning experiences throughout the course.		
EDU581	Pedagogical Practices	1 credits
This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is experienced throughout the		

course.

EDU530	Diverse Family and Community Partnerships	3 credits
<p>Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.</p>		
EDU505	Issues of Poverty in Education	3 credits
<p>This course focuses on the characteristics and effects of poverty on education. Definitions and types of poverty are examined. The impact of poverty on cognitive and physical development as well as learning and behavior on individuals is examined. The influences of poverty on classroom and schools is assessed. Strategies to teach students of poverty and combat poverty in schools are discussed.</p>		
EDU510	Differentiated Reading and Writing	3 credits
<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.</p>		
EDU664	Behavior Management in the Classroom	3 credits
<p>Students investigate the principles and systematic approaches used to identify and analyze problem management techniques, individual behavior and affective intervention strategies, and community-based support programs designed to address problem behaviors. Crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors.</p>		
EDU583	Conflict Resolution	1 credits
<p>This course teaches students how to avoid conflicts from developing and explores methods to resolve conflict. This course also defines and presents a mediation process that employs a specific set of techniques that enables students to peacefully resolve conflict. Students taking this course will learn to manage conflict in their personal life, classroom, and in the workplace.</p>		
EDU671	Collaboration, Consultation, and Teamwork	3 credits
<p>This course focuses on developing effective collaboration skills with members of the school community, as well as the community at large, to provide a realistic and integrated program for all children. Students engage in a variety of group activities that call for the need to analyze group dynamics and implement effective communication strategies.</p>		

EDU609	Literacy	3 credits
<p>The interrelationships among listening, speaking, writing, and reading are investigated with a view toward emphasis on the impact that classroom organization, patterns, materials, and approaches have on teacher effectiveness in teaching elementary and early childhood-aged students, individually and in groups. Students are required to complete a major research paper or project in which they demonstrate knowledge of and skill in using teaching strategies that reinforce the theoretical considerations of the course.</p>		
EDU606	Adolescent Development and Learning Theory	3 credits
<p>This course addresses physical, social, cognitive, and moral development during adolescence. The physical, social, and cognitive changes during puberty are explored in terms of their impact on student participation and performance in school settings. Through the use of case studies, an understanding of the implications of growth and development on instructional planning for effective learning is achieved.</p>		
EDU607	Child Development and Learning Theory	3 credits
<p>Focusing on child development from the prenatal stage to age 12, this course emphasizes current research on physical, cognitive, and social development. Students examine the nature of adolescent development, implications of the cognitive and affective characteristics of adolescents in the selection of instructional methods and materials, and structural and organizational features of typical high schools.</p>		
EDU605	Instructing Students With Autism Spectrum Disorders	3 credits
<p>This course is designed to focus on pertinent issues and topics that concern students with autism. Spectrum disorders. This course provides an overview of evidenced-based instructional strategies used to teach students with autism as well as ways to collaborate with individuals in the home, school, and community. Topics will cover specific instructional strategies, family/community relations, behavior, inclusion and transition.</p>		
EDU657	ELL Teaching Strategies for Classroom Teachers	3 credits
<p>This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.</p>		
PSY555	Statistics and Research Methods	3 credits
<p>The course provides a basic review of descriptive and inferential statistics and how these techniques are used with research methods in counseling psychology. Students will become proficient in computer analysis of data sets, designing and evaluating research designs and techniques, and understanding primary research in counseling literature.</p>		

2022-2023 Course Catalog

Master of Fine Arts in Creative Writing

The Master of Fine Arts in Creative Writing is a broad program of study (42 credit hours) designed to prepare students for careers as writers or other positions requiring similar professional skills, such as editing, publishing, and content development for the web; to enable students to improve their writing in more than one genre through interaction with our faculty and other writing students; and to become experienced critics of literary works. Our focus on nature, environmental, and travel writing provides students unique opportunities to explore the world and travel as part of their degree programs.

Most full-time students will be able to complete the program in two years. All students must complete the program within five years of entrance into the program.

Program of Study:

Complete 42 credits hours of graduate coursework beyond the BA or BS. Students who have not completed an undergraduate major in writing, or in English with a writing focus, may be required to take a basic core of 3 courses before registering for the advanced curriculum.

Admission Requirements

Early Decision Deadline for Fall 2020 for Fellowship/Assistantship MFACW Interviews: **Feb 15**

Recommended regular application deadline for FALL entry: **April 1**

Note: applications will continue to be accepted and considered for admission as long as seats remain in the class.

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale (3.5 or higher recommended for Assistantship/Fellowship consideration).
- 6 credits in undergraduate Writing are recommended, but not required.
If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Complete application for admission, including:
 - [Online application](#)
 - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
 - Curriculum vita or resume
 - Two official letters of recommendation, preferably written by former writing teachers or professors who know your writing
 - Official transcripts from all colleges and universities attended
 - Writing Sample ranging from 10-20 (maximum) pages. It can be one work or several pieces combined. Please provide on standard 8 ½ x 11 paper.

Admissions Materials may be submitted to:

Chatham University
Office of Graduate Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: graduate@chatham.edu

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

At the completion of the MFA program students will:

- Develop and hone skills in creating, editing and revising in the student's primary genre.
- Demonstrate ability to read and respond thoughtfully and critically in both oral and written form to other student's work.
- Analyze and write with care about literary texts of considerable difficulty. Recognize critical positions, including the student's own critical position. Demonstrate a good reading knowledge of modern and contemporary literature.
- Cultivate a professional identity in terms of self-presentation in both written and oral forms. Write and publicly present (orally) a polished creative manuscript of marketable quality.

Curriculum

Degree Requirements

ONE craft course in your primary genre (3 credits)

ENG523	The Craft of Creative Writing: Multiple Genres	3 credits
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This course may substitute for any other craft course for students specializing in any genre. Students will be introduced to the craft of poetry, fiction, and non-fiction, and will also be introduced to the workshop method and given instruction on sending out work for publication.

ENG581	The Craft of Fiction	3 credits
<p>This is a required course for MFA students specializing in fiction. Students will experiment with creating scene, sense of place, summary, dialogue, framing, flashbacks, and transitions. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		

ENG582	The Art and Craft of Narrative	3 credits
<p>Readings and writing in this multi-genre course will focus on constructing narratives in fiction, nonfiction, poetry or writing for children. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		

ENG583	The Art and Craft of the Lyric	3 credits
<p>Readings and writing in this multi-genre course will focus on writing lyrically in poetry and prose. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>		

Craft course must be taken during the fall of student's first year. Craft courses are Prerequisite(s): for all workshops of any genre

ONE readings course in student's primary genre or multi-genre (3) chosen from the following:

ENG531	Readings in Contemporary Lyricism	3 credits
<p>This course is a graduate seminar focusing on the close reading of text from various genres (poetry, fiction, nonfiction, and children's writing) that use lyricism as a primary craft device. Designed to complement the craft workshop, this course or Readings in Contemporary Narrative is required for all MFA students.</p>		

ENG532	Readings in Prose and Poetry	3 credits
<p>This course is a graduate seminar focusing on the close reading of prose and poetry drawn primarily from the modern and contemporary periods. Designed to complement the craft workshops, this course is required of all MFA students.</p>		

ENG533	Readings in Contemporary Narrative	3 credits
<p>This course is a graduate seminar focusing on the close reading of narrative texts from several genres (fiction, nonfiction, poetry, and children's writing), drawn from modern and contemporary periods. Designed to complement craft workshops, this course or Readings in the Contemporary Lyric is required of all MFA students.</p>		

TWO advanced writing workshops (6 credits) in your primary genre chosen from the following:

ENG535	Writing Poetry: Form	3 credits
	A poetry writing workshop to focus on form. Pre Requisite: ENG583	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ENG583 The Craft of Poetry • ENG523 The Craft of Creative Writing: Multiple Genres 	
ENG539	Writing Creative Nonfiction: Memoir	3 credits
	A creative Non-Fiction workshop focusing mainly on the memoir. Pre requisite: ENG582	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ENG582 The Craft of Nonfiction • ENG523 The Craft of Creative Writing: Multiple Genres 	
ENG537	Writing Poetry: Literary Movements	3 credits
	A poetry workshop focusing on readings from a particular poetic movement, and writing poetry that models or responds to movement. Pre-requisite: ENG583	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ENG583 The Craft of Poetry • ENG523 The Craft of Creative Writing: Multiple Genres 	
ENG544	Writing Creative Nonfiction: The Lyric & Formally Adventurous Essay	3 credits
	A creative non-fiction workshop focused on lyric and experimental essay forms.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • ENG523 The Craft of Creative Writing: Multiple Genres 	
ENG545	Writing Creative Nonfiction: Literary Journalism	3 credits
	A creative non-fiction workshop focusing on literary journalism. Pre Requisite: ENG 582	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ENG582 The Craft of Nonfiction • ENG523 The Craft of Creative Writing: Multiple Genres 	
ENG548	Writing Creative Nonfiction	3 credits
	This course is designed to teach the techniques and practice of creative nonfiction through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre-requisite: ENG582	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • ENG582 The Craft of Nonfiction • ENG523 The Craft of Creative Writing: Multiple Genres 	

ENG551	Writing Fiction: The Short Story	3 credits
<p>This course furthers one's technique and practice of fiction writing via focusing on the short story. Classic models are read and analyzed for variety of P.O.V., character development, story structure, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in a workshop format.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • ENG581 The Craft of Fiction • ENG523 The Craft of Creative Writing: Multiple Genres 		
ENG553	Writing Poetry	3 credits
<p>This course is designed to teach the techniques and practice of poetry writing through participation in a process of peer review and commentary, reading and discussions of selections of other poets and poems, and regular submissions of original creative compositions. The course is taught in a workshop format.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • ENG583 The Craft of Poetry • ENG523 The Craft of Creative Writing: Multiple Genres 		
ENG554	Writing Fiction	3 credits
<p>This course is designed to teach the techniques and practice of fiction writing through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre Requisite: ENG581</p>		
<p>Pre-requisites Complete any 1 of the following courses:</p>		
<ul style="list-style-type: none"> • ENG581 The Craft of Fiction • ENG523 The Craft of Creative Writing: Multiple Genres • ENG582 The Craft of Nonfiction 		
ENG557	Writing Fiction: Story Collections/Novel-in-Stories	3 credits
<p>This course furthers one's technique and practice of fiction writing via studying book length story collections and/or story cycles. Contemporary models are considered for their creative melding of varied themes. P.O.V.'s structures, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in in a workshop format. Pre requisite: ENG581</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • ENG581 The Craft of Fiction • ENG523 The Craft of Creative Writing: Multiple Genres 		
ENG589	Creative Writing: Multi-Genre	3 credits
<p>A multi-genre craft course that includes poetry, fiction, creative nonfiction, children's writing and hybrid genres. This course fulfills the craft requirement for all genres.</p>		
<p>Pre-requisites Complete the following course:</p>		
<ul style="list-style-type: none"> • ENG523 The Craft of Creative Writing: Multiple Genres 		

ONE of Nature Writing or Travel Writing:

ENG584	The Environmental Imagination	3 credits
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This is a multi-genre course that focuses on the art and craft of nature and environmental writing. Students will read and study contemporary nature and environmental writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.

ENG585	Travel Writing	3 credits
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This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.

FOUR content courses (12 credits), at least 2 which must be literature-based courses. Sample courses include:

ENG527	Ethnicity and Place	3 credits
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This course focuses on the connection between geographic places and cultural identities. Ethnic, regional, and linguistic markers help define writers' distinctive voices. Dislocation from the place of origination can also result in a creative tension. Students will read a variety of texts that explore the borderlands between ethnicity and place.

ENG546	Wildness and Literature	3 credits
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Students read poetry, nonfiction and fiction that explore the relationship between wilderness and humans as well as the relationship between wilderness and culture. This seminar will trace the idea of wilderness in American literature through the twenty-first century.

ENG552	Ecofeminist Literature	3 credits
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This course brings together theoretical, non-fictional, and fictional approaches to the study of women and the environment. This course focuses particularly on how representations of women and environment can help students rethink and re-imagine their relationships to the Earth.

ONE elective (3) from any course in the MFA program that does not require pre-requisites.

[ONE ENG710 Summer Community of Writers \(6\)](#)

ONE Thesis Seminar corresponding to the student's primary genre (3). Choose from:

ENG605 Prose Thesis Seminar **3 credits**

A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.

ENG606 Thesis Seminar **3 credits**

A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.

ENG607 Thesis Seminar: Poetry **3 credits**

A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.

Note: The Thesis Seminar is a prerequisite for Final Manuscript (698)

ONE ENG 698 Final Manuscript (3)

Concentration in the Teaching of Writing

At Chatham, our teaching concentration focuses on critical pedagogy, practical classroom training, and preparing students for the life of a teaching artist. We provide opportunities to teach both on and off campus, with undergraduates, or through our Words Without Walls program, which brings creative writing classes to students who might not otherwise have the opportunity to engage with literary arts.

To earn the concentration in teaching, students choose two of the following courses:

ENG515 Teaching Creative Writing **3 credits**

Students will explore the genres of poetry, fiction, drama, and nonfiction from the perspective of a teacher, producing lesson plans, as well as developing a final curricular creative writing unit/course. Aspects of lesson design, classroom environment/management, the writing process, writing workshops, assessment, publication, and performance will be emphasized.

ENG512 Teaching Creative Writing in Alternative Spaces **3 credits**

This course prepares students to teach creative writing in alternative spaces, including jails, prisons, halfway houses, and medical facilities. Students will study existing programs, learn strategies to work with special populations, design a course, observe community based classes, and facilitate a community workshop.

PSY646 Intergroup Dialogue Facilitation Training **3 credits**

This course gives students a foundation to facilitate intergroup dialogue classes and workshops. The topics of this course include group facilitation skills; individual and group social identity development; impact of prejudice and stereotyping; difference and dominance and the nature of social oppression; culture, cultural cues and judgments.

After completing two courses, students apply for a supervised teaching placement. Teaching placements are normally fulfilled by teaching a section of ENG105 to Chatham undergraduates, or through a placement in our Words Without Walls program.

Concentration in Literary Publishing

Students who wish to concentrate in literary publishing may take nine hours of related courses to do so.

Choose from:

ENG595 Independent Literary Publishing **3 credits**

This course gives students the opportunity to gain hands-on experience as publishers. Students will research independent literary presses or magazines of their own choosing, and then they will publish a literary chapbook by an author other than themselves.

ENG569 Practicum: Fourth River Journal-2 **3 credits**

This course is a practicum in which grad students publish the print edition of Chatham's national literary journal, The Fourth River. All phases of the publishing process are addressed, with a special emphasis on design, production, proofreading, marketing, and distribution.

ENG694 Internship **3 credits**

Internship with a publishing company, literary press or other writing organization.

Concentration in Travel Writing

Students who wish to concentrate in Travel Writing must take nine hours of related courses to do so.

Choose from:

ENG585	Travel Writing	3 credits
<p>This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>		
ENG674	Field Seminar: International	3 credits
<p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will always be outside the United States. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>		
ENG676	Artists in the Community	3 credits
<p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will be within Pittsburgh and Western Pennsylvania. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>		
ENG693	Independent Study	3 credits
<p>Independent study on topics of the student's choosing.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 		

Concentration in Nature Writing

Students who wish to concentrate in Nature Writing must take nine hours of related courses to do so.

Choose from:

ENG552	Ecofeminist Literature	3 credits
<p>This course brings together theoretical, non-fictional, and fictional approaches to the study of women and the environment. This course focuses particularly on how representations of women and environment can help students rethink and re-imagine their relationships to the Earth.</p>		
ENG584	The Environmental Imagination	3 credits
<p>This is a multi-genre course that focuses on the art and craft of nature and environmental writing. Students will read and study contemporary nature and environmental writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>		

ENG546	Wildness and Literature	3 credits
	Students read poetry, nonfiction and fiction that explore the relationship between wilderness and humans as well as the relationship between wilderness and culture. This seminar will trace the idea of wilderness in American literature through the twenty-first century.	

Concentration in Food Writing

Students who choose the Food Writing Concentration may count one of the FST courses as one of their MFA required content courses, and may count the other FST course as an elective. With permission of the MFA and Food Studies Program Directors students may choose to substitute a special topics Food Studies course (i.e., FST 602 Grains FST610 Culture and Politics of Sustainable Meat; FST 531 Fermentation; FST 609 Dairy; or FST 6XX Chocolate)

Required:

ENG513	Writing About Food	3 credits
	Students will develop technique and skills for writing about food and culture by studying ethics; journalism, advertising, multimodal and new technology venues, recipe writing, food criticism, writing about food in a variety of genres from history to fiction, magazines, and websites. Course emphasizes both print and online media.	

Plus two of the following:

FST505	Food and Representations	3 credits
	Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.	

FST683	Special Topics	3 credits
	Special Topics	

FST603	Food Journeys	3 credits
	From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.	
	Pre-requisites Complete all 2 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 	

MFA Thesis Requirements

All MFA students (full and low-residency) will convene a thesis board committee comprised of four members: the student, their director, and two outside readers. Students must choose a thesis director during the spring of their second year. For full-res students this director must be a member of the full-time MFA faculty. For low-res students, it may be a member of the full-time faculty or one from a list of trusted, long term adjunct mentors identified by the MFA program. Students will also choose two readers for their thesis committee. These readers may be from the full-time faculty or from a list of trusted, long term adjunct mentors. Adjunct readers and directors receive honoraria for their work. Depending on individual circumstances, the program director may allow a reader from outside of Chatham to participate on a student's board. Students should have such conversations early in the process so there is no confusion or surprise. All thesis boards must be approved by the program director. Concentration in the Teaching of Writing Students who wish to earn a Concentration in the Teaching of Writing take an additional nine credits specifically in courses designed to study the pedagogy of writing. Students earning this concentration take related course work throughout the degree program aimed at increasing their knowledge and understanding of current theoretical and practical approaches to the teaching of creative writing. During the final semester, students teach in a field placement that they design and implement in a working classroom or other approved setting.

Concentration in Social Engagement

Students who wish to concentrate in Social Engagement may take nine hours of related courses to do so:

ENG572	The Literature of Social Engagement	3 credits
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A course in which students examine literature that engages with social problems. Readings will include poetry, creative nonfiction, literary journalism, scriptwriting, and fiction. In examining these texts, we will analyze the finished product as well as research methods authors used to research a topic and render it on the page.

ENG694	Internship	3 credits
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Internship with a publishing company, literary press or other writing organization.

PSY646	Intergroup Dialogue Facilitation Training	3 credits
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This course gives students a foundation to facilitate intergroup dialogue classes and workshops. The topics of this course include group facilitation skills; individual and group social identity development; impact of prejudice and stereotyping; difference and dominance and the nature of social oppression; culture, cultural cues and judgments.

OR

ENG512 Teaching Creative Writing in Alternative Spaces**3 credits**

This course prepares students to teach creative writing in alternative spaces, including jails, prisons, halfway houses, and medical facilities. Students will study existing programs, learn strategies to work with special populations, design a course, observe community based classes, and facilitate a community workshop.

2022-2023 Course Catalog

Master of Fine Arts in Creative Writing - Low Residency

Chatham University's Low-Residency Master of Fine Arts Creative Writing (MFA) program is 42 credits hours that can be completed in two years with two summer residencies of 10 days each. The program is very similar to Chatham University's highly acclaimed residency program with the same innovative focus on nature, environment, and travel writing. It is the premier graduate program for nurturing creative writers interested in the environmental imagination and place-based writing. Alumna Rachel Carson, a creative writer whose work demonstrates both lyricism and social conscience, inspires the program.

The low residency program is different from the residency program in a couple of ways. First, in lieu of writing workshops and literature courses each term, students take six-credit mentorships with a publishing writer. These mentorships are meant to combine the rigors of a writing workshop with that of a graduate-level literature course. Second, low residency students must complete two residencies of ten days each in their first and second summers. The MFA program's [Summer Community of Writers](#) residency takes place on the Chatham University Eden Hall Campus in Pittsburgh and consists of intensive workshops, craft lectures, panels, and readings with well-known creative writers and faculty. Students are required to live and eat on campus. A residency fee of approximately \$500 covers lodging and all meals in the dining hall. Low residency students have the opportunity to take one of the creative writing field seminars along with the residency students, although the field seminar is not required. Field seminars include additional fees for travel and lodging and will vary depending on the location.

Admission Requirements

The Low Residency Program is a rolling admission Program, there is no formal application deadlines.

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale
- 6 credits in undergraduate Writing are recommended, but not required.
If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Complete application for admission, including:
 - [Online application](#)
 - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
 - Curriculum vita or resume
 - Two official letters of recommendation, preferably written by former writing teachers or professors who know your writing
 - Official transcripts from all colleges and universities attended
 - Writing Sample ranging from 10-20 (maximum) pages. It can be one work or several pieces combined. Please provide on standard 8 ½ x 11 paper.

Admissions Materials may be submitted to:

Chatham University
Office of Graduate Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: graduate@chatham.edu

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

At the completion of the MFA program students will:

- Develop and hone skills in creating, editing and revising in the student's primary genre.
- Demonstrate ability to read and respond thoughtfully and critically in both oral and written form to other student's work.
- Analyze and write with care about literary texts of considerable difficulty. Recognize critical positions, including the student's own critical position. Demonstrate a good reading knowledge of modern and contemporary literature.
- Cultivate a professional identity in terms of self-presentation in both written and oral forms. Write and publicly present (orally) a polished creative manuscript of marketable quality.

Curriculum

Degree Requirements

42 credits

ENG600	Foundations of Creative Writing	3 credits
	ENG 600 is a first-year tutorial course comprised of one teacher and one student; it is designed to provide a foundation in creative writing craft for the student writer.	

ENG601	Foundations in Literary Analysis ENG 601 is a first-year tutorial course for students choosing the low-res MFA format, comprised of one teacher and one student; it is designed to provide a foundation in analytical reading and writing for the student writer.	3 credits
ENG621	Advanced Literary Analysis I ENG 621 is a first-year mentorship, comprised of one teacher and one student; it is designed to deepen the development of the student writer. In it, students work one-on-one with a faculty mentor who guides their study of literature and analysis. ENG 621 should build off the work of ENG 601.	3 credits
ENG622	Advanced Creative Writing I ENG 622 is a first-year mentorship, comprised of one teacher and one student; it is designed to deepen the development of the student writer. In it, students work one-on-one with a faculty mentor who guides their study of creative writing craft. ENG 622 should build off the work of ENG 600.	3 credits
ENG623	Advanced Literary Analysis II ENG 623 is a second-year mentorship comprised of one teacher and one student; it is designed to refine the development of the student writer. In it, students work with a faculty mentor who guides their study of literature and analysis. ENG 623 should build off the work of ENG 621.	3 credits
ENG660	Thesis Writing Mentorship ENG 660 is a second-year mentorship course comprised of one teacher and one student; it is designed to expedite the development of the student's creative thesis project. During the 3-credit mentorship, a student works one-on-one with a faculty mentor who guides the student's generation of creative thesis materials.	3 credits
ENG624	Advanced Creative Writing II ENG 624 is a second-year mentorship comprised of one teacher and one student; it is designed to refine the development of the student writer. In it, students work with a faculty mentor who guides their study of advanced creative writing. .	3 credits
ENG698	Final Manuscript Independent work on the final creative thesis and critical introduction. Taken in the last year of the MFA. The Thesis Seminar (ENG 605, 606, 607, 608, or 609) is a prerequisite for this course. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • ENG605 Prose Thesis Seminar • ENG606 Thesis Seminar • ENG607 Thesis Seminar: Poetry • ENG608 Thesis Seminar: Children's Writing • ENG609 Thesis Seminar: Screenwriting 	3 credits

ENG710I	Summer Community of Writers - Part One Summer Community of Writers - Part One	6 credits
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ENG710II	Summer Community of Writers - Part Two Summer Community of Writers - Part Two Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none">• ENG710 Summer Community of Writers• ENG710I Summer Community of Writers - Part One	6 credits
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ONE content courses, (3 credits). This may be literature, publishing, or internships. Non-creative writing. Course offerings may include ENG585 Travel Writing, ENG584 The Environmental Imagination, ENG674 International Field Seminar, ENG569 Practicum: Fourth River Journal etc.

ONE elective course (3 credits) This may be any course in literature, creative writing, publishing, or internships. Course offerings may include ENG585 Travel Writing, ENG584 The Environmental Imagination, ENG674 International Field Seminar, ENG569 Practicum: Fourth River Journal, ENG709 Summer Community of Writers, etc.

2022-2023 Course Catalog

Master of Fine Arts in Film and Digital Technology

The MFA program is focused on advanced project work in a range of media production areas, principally film/video, DVD, and the Web. It is designed to extend and develop students' experiences and knowledge in the field of media production and their understanding of creative and critical practice within the media industries. Students in the MFA in Film and Digital Technology program are encouraged to explore the ways boundaries between previously separate forms of media production are blurring. Students will focus on developing their understanding of how emerging concepts such as interactivity, connectivity, and convergence of emerging technologies such as DVD and interactive video are creating new creative possibilities, production processes, and delivery systems for more traditional forms of media production, such as film and video.

The program is mainly project-based, with students working in small groups on a range of media productions. Students have the ability to customize their activities according to their interests and specializations. The program includes research components, where students are asked to place their production works in broader social, historical, cultural, and theoretical contexts. Particular emphasis is placed on industry, and students who complete the MFA will have a high level of industry readiness, with a realistic and well-informed sense of the career possibilities in this rapidly changing area.

Admission Requirements

Recommended Application Deadline for Fall entry **July 1st**

Recommended Application Deadline for Spring entry: **November 1st**

**Note: applications will continue to be accepted and considered for admission if seats remain in the class.*

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale.
If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Completed application for admission, including:
 - [Online application](#)
 - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
 - Curriculum vita or resume, please feel free to include volunteer activities
 - Two letters of recommendation
 - Official transcripts from all colleges and universities attended
 - Portfolio or other examples of work in film and/or digital media

Admissions Materials may be submitted to:

Chatham University

Office of Graduate Admission

Woodland Road

Pittsburgh, PA 15232

Fax: (412) 365-1609

Email: graduate@chatham.edu

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

1. Media Literacy, Analysis and Context

- a. Students must have a historical understanding of the media they are using and the ideas they are pursuing in their creative work.
- b. Students must be aware of major theories influencing the photography, graphic design, film, video and new media field.
- c. Students must develop original and well-informed responses to theoretical and critical analysis.
- d. Students must look for interdisciplinary relationships between media arts and other fields of research.

2. Creative Processes

- a. Students must develop and transform original concepts into well-conceptualized projects - demonstrating a competency in project design development.
- b. Students must choose appropriate media for the development of their project and/or idea.
- c. Students must communicate their processes through various stages of development.

3. Technical Fundamentals

- a. Students must have knowledge of the technology they are utilizing for their projects (saving/storing files, various software packages and techniques, hardware, scanning, photo and digital video equipment).
- b. Students must create original projects that draw on their knowledge of the technological form in order to thoroughly investigate relationships between concept development and media used.
- c. Students must properly troubleshoot and solve technical-related problems.

4. Professional Practice

- a. Students must develop projects with an understanding of a diversified audience.
- b. Students must properly document their projects, choosing appropriate forms of media.
- c. Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution

or field contribution.

d. Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.

e. Students must develop attitudes of professional responsibility and accountability.

f. Students must develop professional discipline (time-management, organizational skills).

Curriculum

Degree Requirements

36 credits, including:

FDT543	The Media Production Industry	3 credits
This course is offered in the final semester of the program and is designed to enhance the ability of graduates to establish themselves in the media production industry.		

OR

FDT571	e-Merging Media I	3 credits
Maps ways the web can be utilized for the production of alternative narratives. Enables students to analyze and create works online using web-cams, streaming media, and interactive web-based projects. Additional fees: Course Computing fee		

FDT550	Media Project I: Digital Video Production	3 credits
Media Project I introduces the production process for digital video and other media work, from concept to production to completed piece. This course provides an understanding of the tools for each step of production and students focus on the technical elements of shooting and editing video.		

FDT563	Media Contexts I: Media History	3 credits
Provides overview for incoming graduate students of current rhetorical concerns related to independent media, film production, and histories.		

FDT641 The Craft of Screenwriting **3 credits**
Provides a focus on the art and craft of Screenwriting. Students will read and study contemporary Screenwriting, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to filmmakers in this genre.

OR

FDT671 Emerging Media II: Advanced Web Design **3 credits**
Focuses on the technical through advanced study. Students will produce DVD, CD-ROM, and other interactive projects. Additional Fees: Course Computing Fee

FDT650 Media Project II: Advanced Digital Video Production **3 credits**
The course expands on the knowledge gained in Media Project I and focuses on the nonlinear editing process. Students develop their existing foundational software knowledge, learn to navigate additional NLE systems used by the industry, and have the opportunity to explore how these programs can enhance traditional editing techniques.

FDT663 Media Contexts I: Theory **3 credits**
Analyzes the aesthetic conventions, narrative, and formats of new media, as well as the impact digital technologies have had on existing media.

FDT666 Cinematography and Lighting **3 credits**
In this course, students will focus on the skills required to make appropriate camera and lighting decisions under a variety of field and studio situations. Students will gain mastery of advanced concepts and principles of camera operation, camera movement, use of lenses, composition and lighting techniques used in digital filmmaking.

OR

FDT613 Special Topics **3 credits**
Special Topics Class

FDT675 Media Project III: Advanced Sound Production **3 credits**

Focuses on advanced sound recording, editing, and mixing technologies using Pro Tools digital audio workstation. Additional Fee(s): Course Computing fee

FDT676 Media Project IV: Visual Effects & Animation Modes **3 credits**

Extends to visual effects, animation modes and compositing. Students will utilize this course to develop their masters' thesis topic and begin pre-production processes. Additional Fee: Course Computing Fee

FDT698 Portfolio

FDT699 Media Project V: MFA Thesis

2022-2023 Course Catalog

Master of Interior Architecture

The Master of Interior Architecture is a Council for Interior Design Accreditation (CIDA) accredited first professional interior design program consisting of 72 semester credits. This degree is for students with an undergraduate degree in a field other than interior design or architecture. The curriculum includes foundation courses in interior architecture a dynamic studio sequence, an internship, and a capstone studio. The Master of Interior Architecture prepares students for practice in an interior design or architecture firm. A holistic design approach is stressed throughout the two-year, five-semester program. Students are encouraged to consider all factors that influence the design of interior spaces from human behavior, aesthetics, and building technology to the views from windows and doors that penetrate the surrounding architecture. Specifically, the curriculum focuses on the design of residential and commercial spaces – how space is organized, developed three-dimensionally, finished with materials and color, lit, furnished, and designed to incorporate user needs and building codes. Admitted students will be required to purchase a laptop computer prior to matriculating into the program. Information on appropriate computer specifications is available on the MIA website. This review provides students with an opportunity to elicit feedback from faculty on their progress mid-way through the program. Students in the MIA program are invited to participate in the Fallingwater Maymester. Typically offered in the first Maymester of study, students have the unique opportunity to explore, study, and experience Frank Lloyd Wright's masterpiece via a 5-day, 4-night on site residency.

Admission Requirements

Recommended application deadline for FALL entry: **July 1**

Recommended application deadline for SPRING entry: **November 1**

Note: applications will continue to be accepted and considered for admission as long as seats remain in the class.

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale.
If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.
- Completed application for admission, including:
 - [Online application](#)
 - In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
 - Curriculum vita or resume
 - Two letters of recommendation
 - Official transcripts from all colleges and universities attended

Admissions Materials may be submitted to:

Chatham University
Office of Graduate Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: graduate@chatham.edu

For specific questions about the Program, please reach out to Rachel Fiscus at 412-365-1141 or at r.fiscus@chatham.edu.

Integrated Degree Program

Chatham University undergraduates applying through the Integrated Degree Program (IDP) must complete all requirements outlined on their respective admission or track tab on the [IDP Portal Site](#). All IDP applicants should work closely with their academic advisor to ensure they are meeting all requirements according to their IDP course of study.

Learning Outcomes

[Download the program outcomes](#) [PDF]

Learning Outcomes

Upon successful completion of the program, students will be able to:

- Effectively locate and gather information associated with both practice and research through a variety of information media
- Evaluate the quality and accuracy of information they locate
- Extract information from sources associated with practice and research
- Evaluate the quality and accuracy of written information
- Critically evaluate the executed works of designers
- Make informed design decisions based on aesthetics, building technologies, human needs and the health, safety and the welfare of the public
- Exhibit a variety of design ideas, approaches and concepts with originality
- Transform conceptual design ideas into a detailed solution that takes into account existing building constraints, user needs, cost, building codes and standards, and a program of spaces
- Engage in problem solving with respect to design projects of varying type, size and scope
- Communicate clearly in writing, in short papers for supporting coursework, concept statements and building programs in the design studios, specifications and schedules for construction documents and contracts and business-related documents
- Formulate a point of view and have the ability to articulate and defend it in written form
- Express ideas clearly in oral presentations and critiques with classmates, other instructors and professionals from the design community

- Formulate a point of view and have the ability to articulate and defend it orally
- Demonstrate a sustainable approach to interior design
- Think critically and see inquiry as the norm
- Identify, research, and solve design challenges with a logical methodology
- Demonstrate creative solutions and applied spontaneity
- Understand how to conduct and apply research findings
- Demonstrate strong professional communication skills and be able to present their design ideas and solutions with confidence
- Be globally-conscious interior designers

Curriculum

Degree Requirements

23 courses (72 credits), including

IAR518	Building Codes	3 credits
<p>Students learn and apply relevant building codes as they relate to the health, safety, and life safety of the occupant. This course addresses energy laws, the principles of Universal design, and accessible code compliance. Pre-requisites: IAR520, IAR535</p>		
IAR519	Drafting and Model Making	3 credits
<p>Intended for interior architecture majors or potential majors. This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding is developed of architectural scale, plans, elevations, and sections. Students will explore three-dimensional model making techniques.</p>		
IAR520	Architecture Studio II	3 credits
<p>This studio addresses problem identification and problem solving in the context of medium to large-scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, basic elements of 2-D and 3-D design, concept development, space planning, scale, textiles, and color with respect to user needs.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • IAR510 Drafting Studio • IAR510 2D Visual Communications Complete any 1 of the following courses: • IAR519 Drawing and Model Making • IAR519 Drafting and Model Making Complete any 1 of the following courses: • IAR532 Color and Textiles • IAR532 Color and Textiles Studio I 		
IAR525	Interior Architecture Studio III	3 credits
<p>The studio addresses problem identification and solutions in the context of medium to-large scale projects of complex scope. Emphasis is placed on programming human factors, universal design principles, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs.</p> <p>Pre-requisites Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • IAR502 Theory of Interior Architecture • IAR515 Digital Visualization II 		

- IAR520 Architecture Studio II
- IAR535 Construction Methods

IAR530	Interior Materials	3 credits
<p>This course is intended for majors or potential majors and addresses architectural materials and finishes. Students learn to select, specify, and apply architectural finishes. They create specifications, execute take-offs, and produce cost estimates for interior construction. Manufacturing processes, installation methods, maintenance requirements, code regulations, and testing standards are covered.</p>		
IAR532	Color and Textiles Studio I	3 credits
<p>The first part of this residential studio examines theories in color in relation to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.</p>		
IAR561	History of Interior Architecture	3 credits
<p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>		
IAR562	20th & 21st Century Architecture	3 credits
<p>This course is designed to relate the impact of architecture on both public and private spaces throughout the 20th century and provide a view towards the future of architecture in 21st century. The course will guide you through the major styles of architecture of the 20th century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings, and the arts and artists of the day.</p>		
IAR610	Digital Visualization III	3 credits
<p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for us in all phases of the design process. Students are instructed to Revit and Sketch-up. Graphic skills are also developed to help students communicate interior design schemes. Additional fees: Course Computing Fee</p>		
IAR615	Construction Documents Studio	3 credits
<p>Construction techniques are studied through the production of a set of construction documents. Issues addressed include the selection and assembly of materials, construction methods, detailing of interior finish systems and cabinetry, building codes, and accessibility. Additional Fees: Course Computing Fees</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IAR525 Interior Architecture Studio III • IAR610 Digital Visualization III <p>Co-requisites</p>		

- IAR620 Interior Architecture III

IAR616	Portfolio	3 credits
	This course will allow Interior Architecture students to solidify their professional portfolio for prospective internships and employment. Students will produce a physical and digital portfolio. Additional fees: Course Computing Fee.	
IAR620	Interior Architecture Studio IV	3 credits
	This advanced studio addresses concept development, design development, and detailing of medium-to-large scale projects. Emphasis is placed on program analysis, user needs, universal design, space planning, three-dimensional spatial development, design language, composition, materials and assemblies, color, lighting, acoustics, environmental systems, building codes, and life safety. Additional Fees: Course Computing Fee.	
IAR630	Construction Systems and Methods	3 credits
	This course provides an overview of architectural building systems, including exterior and interior construction methods and terminology as well as environmental control systems, including HVAC, plumbing, fire protection, power distribution, security, building codes, and data/voice telecommunication. Emphasis is placed on energy consumption and conservation, human comfort, and health and safety.	
IAR631	Design for Sustainability	3 credits
	Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.	
IAR635	Lighting and Acoustics Studio	3 credits
	This course is an introduction to lighting and acoustics. Emphasis is placed on the psychology of lighting, visual comfort criteria, measurement and calculations, available technologies in lighting design, the selection of fixtures, and the application of computer aided lighting simulation tools. Principles of acoustics, acoustic properties of materials and building systems in relation to building structures, sound transmission between rooms, and design methods in room and building acoustics are also addressed. Pre- requisites: IAR 525, 515. Additional Fees: Course Computing Fee	
	Pre-requisites Complete all 3 of the following courses:	
	<ul style="list-style-type: none"> • IAR515 Digital Drawing • IAR502 Theory of Interior Architecture • IAR520 Interior Architecture I 	
IAR645	Professional Practice	3 credits
	In this course, students are introduced to the specialized services provided by the professional interior designer. Emphasis is placed on office operations and personnel issues, marketing strategies, project management, contract documents, ethics, and the legal and financial aspects of professional practice.	

IAR650	Interior Architecture V: Capstone Studio	3 credits
	<p>This course stresses evidence-based design. Students create a program for a project influenced by their research in IAR655. The program and research findings serve as a foundation for the investigation of a design detailing. Additional fees: Course Computing Fee.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • IAR615 Construction Documents Studio • IAR615 Construction Documents 	
IAR655	Immersive Design Research	3 credits
	<p>This graduate seminar is a review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods for gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools, culminating in the development of a research proposal.</p>	
IAR502	Theory of Interior Architecture	3 credits
	<p>This course cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises including concept development, abstract ideation, physical embodiment, architectural composition and analytical review.</p>	
IAR505	Design and Behavior	3 credits
	<p>The designed environment influences and is influenced by human activity patterns and behavior. This course is an introduction to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.</p>	
IAR510	2D Visual Communications	3 credits
	<p>Intended for interior architecture majors or potential majors, this course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding of design thinking and visualization is developed. One-point, two-point, isometric, and axonometric drawing methods will be covered. Additional fee(s): applied art fee.</p>	
IAR514	Digital Visualization I	3 credits
	<p>This course explores design principles related to color theory, typography, branding, web design, print design and layout relative to portfolio design, interior design presentation, communication and development. This course also explores basic human centered design and product design principles as a basis for portfolio and visual design. This course is designed to aid and mentor students in assembling a design portfolio of their academic and professional work. Students will learn graphic design techniques for both print and web, including basic tools in the Adobe Creative Suite.</p>	

IAR515 Digital Visualization II**3 credits**

Students learn the basic computer drafting and drawing skills associated with AutoCAD software. Projects include creating new work and working from existing files. An understanding of drawing layers, detailing, layout, and printing will be presented. Adobe Creative Suite and other rendering software are covered. Additional Fee: Course Computing fee.

Pre-requisites Complete the following course:

- IAR510 Drafting Studio
Complete the following course:
- IAR510 2D Visual Communications

IAR641 Internship**3 credits**

An internship experience provides students with a greater understanding of professional practice. With instructor approval, students work full-time in an office environment under the supervision of a practitioner.

Pre-requisites Complete the following course:

- XXX123 Permission of Instructor

OR an approved elective

2022-2023 Course Catalog

Master of Physician Assistant Studies (MPAS)

All physician assistant studies courses are limited to physician assistant studies students, unless permission is obtained from the program director.

The curriculum is a 24 month (85 semester credits) professional course of study leading to the MPAS degree. Basic medical sciences, research, clinical methods, and clinical experiences are integrated from the beginning of the program and continued throughout the course of study.

The program produces physician assistants capable of providing primary medical care in an ethical, legal, safe, and caring manner. To achieve this, students must acquire knowledge and the ability to use that knowledge in the practice of medicine. Students are expected to consistently retrieve and apply their knowledge appropriately in the area of their patients and reason effectively. Self-directed learning skills are necessary in order to keep their knowledge current. Self-knowledge, knowledge and understanding of others and continued professional development beyond the degree are necessary for success.

Chatham University utilizes hybrid model of Problem-Based Learning, lecture, and on-line activity that challenges students to be self-directed and prepares students for the evidence-based, problem-oriented world of clinical medicine. Through actual patient cases, students develop learning issues and research topics using the most up to date resources, work in teams and receive feedback on knowledge base as well as professionalism to prepare them for primary care, problem-focused clinical practice.

The MPAS program is competency-based, requiring all students to master the required material. The grading system is pass/fail. Individual course syllabi provides specific pass/fail criteria. Upon entrance to the PA Studies Department students agree to the electronic release of grades and academic information within departmental faculty and staff for academic standing and advising reviews.

A student in the MPAS program must be in good academic standing to remain enrolled in the program. To be eligible for graduation, students must be in good academic standing and successfully complete all required courses. Upon completion of all required courses, students must also meet the requirements of a summative evaluation which includes: medical knowledge, interpersonal skills, patient care skills, and professionalism.

Admission Requirements

Applying to the Master of Physician Assistant Studies (MPAS) Program

Chatham University's Physician Assistant Studies program is a member of the Centralized Application Service for Physician Assistants (CASPA). All applications must be submitted through CASPA with all relevant materials (transcripts, PA shadowing information and recommendations) at <https://caspa.liasoncas.com>. Refer to the [MPAS website](#) for all Admission requirements, deadlines, and questions.

Technical Standards

The student must possess the mental, physical, and emotional capacities essential to attaining the competencies required to function as a physician assistant. All PA students will be expected to have abilities in five categories: observation, communication, motor, intellectual and social. These abilities enable the student to perform tasks required to meet graduation and professional requirements as measured by state and national certification, licensure and registration processes. Candidates who possess any disability that would potentially interfere with the attainment of such competencies are encouraged to contact the Graduate Admission Recruiter, [Tyson Schrader](#), or the Director of the MPAS program, [Judy Truscott](#), to discuss and identify possible accommodations. Chatham University and/or affiliated sites may arrange to enable the candidate to demonstrate the necessary physical, mental, and emotional capacities.

Observation: Candidates must have sufficient sensory capacity to observe in the problem-based learning and lecture settings, the laboratory, and the health care or community setting. Sensory abilities must be adequate to perform appropriate examination or assessments including functional vision, hearing, and tactile sensation to observe a patient's condition, and to elicit information appropriate to a physician assistant.

Communication: Students must be able to communicate effectively and professionally in academic, community, educational, and health care settings, and be able to demonstrate proficiency in both verbal and written English.

Motor: Students must have the ability to participate in basic diagnostic and therapeutic maneuvers and procedures. Students must be able to negotiate patient care environments, and be able to move between settings such as the classroom, health care facility, educational, or community setting. Physical stamina sufficient to complete the rigorous course of didactic and clinical study is required. Long periods of sitting, standing or moving are required in a variety of learning sites. Students must be proficient in typing skills.

Intellectual: Students must be able to measure, calculate, reason, analyze, and integrate information as well as be able to comprehend temporal and spatial relationships.

Social: Students must exercise good judgment and be able to function, appropriately and effectively, in the face of uncertainties inherent in clinical practice, and must maintain mature, sensitive and effective professional relationships with faculty, students, patients, and other members of the health care and/or educational team. Students are expected to fully participate in physical examination courses as both examiners and patients. Students should be comfortable with modest exposure of the body to allow for adequate examination (donning of sports bra or tank top for women, males will remove shirt; and shorts for both males and females). Students must also be able to be comfortable with donning surgical scrub clothing that expose the arms above the elbows, the neck and upper chest areas.

Students should be completely comfortable working in small groups for Problem Based Learning, including, but not limited to: verbal discussion of knowledge and limitations of knowledge, scribing of information via handwritten transmission in front of a group of students and a faculty member, or typing via use of smart board technology in front of a group of students and a faculty member.

In lab settings, students should be comfortable with and prepared to work with different students, both male and female, with regard to physical examination and/or procedures in a large room with other students present. No genital, breast, or rectal examinations are performed on fellow students.

Learning Outcomes

Chatham University MPAS Program-Defined Competencies

1. Apply knowledge of basic sciences with a focus on clinical application across the lifespan.
2. Perform an appropriate history and physical examination to determine a differential diagnosis and plan of action.
3. Manage general medical and surgical conditions to include understanding the indications, contraindications, side effects, interactions, and adverse reactions of pharmacologic agents and other appropriate treatments.
4. Competently perform clinical procedures considered essential in primary and surgical care.
5. Students will develop the skills necessary to become lifelong learners and demonstrate commitment to stay current with medical knowledge through critical evaluation of medical literature.
6. Exercises cultural humility by recognizing the cultural norms, needs, influences, and socioeconomic, environmental, and other population-level determinants affecting the community and individual being served.
7. Demonstrates ability to effectively communicate across the continuum (verbally, non-verbally, and in writing), with patients, families, and the healthcare team.
8. Respect the dignity and privacy of patients across the lifespan including consideration for legal and ethical matters.
9. Demonstrates emotional resilience, adaptability, self-awareness, and understands the importance of wellness and self-care.
10. Identify risk factors, screening, and interventions for the prevention of diseases across the lifespan.
11. Understand the legal aspects of the healthcare system including the regulatory environment, funding and payment sources, PA scope of practice, and PA/physician relationship.

Curriculum

Degree Requirements

Completion of 85 credits in physician assistant studies courses. All courses are pass/fail grading only.

PAS600	Essentials for the Physician Assistant I	9 credits
	Essentials for the Physician Assistant I is a problem-oriented approach to primary and specialty care medicine. This course incorporates medical diagnosis and treatment; pharmacotherapeutics; psychosocial assessment and management; patient education; management of patients with chronic illness; clinical decision making; and prevention of	

disability and disease through detection, education, and prevention. The course is divided into three segments, Units 1, 2, and 3.

PAS601	Essentials for the Physician Assistant II	9 credits
	<p>Essentials for the Physician Assistant II is a problem-oriented approach to primary and specialty care medicine. This course incorporates medical diagnosis and treatment; pharmacotherapeutics; psychosocial assessment and management; patient education; management of patients with chronic illness; clinical decision making; and prevention of disability and disease through detection, education, and prevention.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PAS600 Essentials for the Physician Assistant I	
PAS602	Clinical Application of Basic Sciences I	4 credits
	<p>An in-depth study of topics in gross human anatomy, physiology, and pathophysiology, supporting the instruction in the Essentials for the Physician Assistant courses. Instruction will involve basic sciences with an emphasis on the clinical application of the material, utilizing a systems approach.</p>	
PAS603	Clinical Application of Basic Sciences II	4 credits
	<p>This course is a continuation of PAS 602. An in-depth study of topics in gross human anatomy, physiology, and pathophysiology, supporting the instruction in the Essentials for the Physician Assistant courses. Instruction will involve basic sciences with an emphasis on the clinical application of the material, utilizing a systems approach.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• PAS602 Clinical Application of Basic Sciences I	
PAS604	Critical Reading of the Literature I	1 credits
	<p>Students critically evaluate medical literature and resources used in the Essentials for the Physician Assistant courses, including research design, data collection, and statistical analysis.</p>	
PAS605	Critical Reading of the Literature II	1 credits
	<p>This course is a continuation of PAS 604. Students critically evaluate medical literature and resources used in the Essentials for the Physician Assistant courses, including research design, data collection, and statistical analysis.</p>	
PAS606	Clinical Pharmacology I	2 credits
	<p>This clinically oriented course provides students with knowledge required for the safe and effective use of pharmaceutical agents in the diagnosis, prevention, and treatment of diseases through an understanding of pharmacokinetics and pharmacodynamics. Topics selected will support the body systems covered in the Essentials for the Physician Assistant courses.</p>	

PAS607	Clinical Pharmacology II	2 credits
	<p>This course is a continuation of PAS 606. This clinically oriented course provides students with knowledge required for the safe and effective use of pharmaceutical agents in the diagnosis, prevention, and treatment of diseases through an understanding of pharmacokinetics and pharmacodynamics. Topics selected will support the body systems covered in the Essentials for the Physician Assistant courses.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • PAS606 Clinical Pharmacology I 	
PAS610	Introduction to Clinical Experience I	2 credits
	<p>This course will introduce the student to various types of medical documentation and medical terminology. It will address HIPAA and OSHA regulations, as well as Universal Precautions. Professional comportment while on rotations will also be introduced.</p>	
PAS611	Introduction to Clinical Experience II	2 credits
	<p>This is a continuation of PAS 610. Students will continue to explore various types of medical documentation, and issues surrounding cultural sensitivity in medicine. Professional comportment and communication skills will be addressed. Students will be introduced to billing and coding. Policies and procedures for clinical rotations will also be introduced.</p>	
PAS612	Introduction to the PA Profession	1 credits
	<p>This course introduces the students to the physician assistant profession and their role in the American healthcare system. Topics of discussion include history of the profession, national and state organizations, federal and state laws affecting practice, education, and the future of the profession.</p>	
PAS614	Medical Ethics	1 credits
	<p>Contemporary professional medical ethics issues are discussed and debated. Instruction is provided through classroom discussions, guest lectures, and small group discussions/presentations.</p>	
PAS617	Clinical Procedures	2 credits
	<p>Laboratory course covering theory and application of common clinical procedures that a physician assistant will encounter during practice. Students demonstrate competence through practical evaluations.</p>	
PAS625	Clinical Decision Making I	1 credits
	<p>Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.</p>	

PAS626	Clinical Decision Making II Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.	1 credits
PAS627I	Clinical Decision Making III Part One Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.	1 credits
PAS627II	Clinical Decision Making III Part Two Genetic based case presents the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. Introduction to MAT (Medication Assisted Treatment) is also covered.	1 credits
PAS628	Clinical Decision Making IV Drawing on skills acquired in PAS 625, 626 & 627, as well as knowledge that has been acquired throughout the curriculum, students develop case presentations which include history, physical examination, diagnostics, treatment, and patient education, based on specific disease entities. Additionally, students complete summative program evaluations related to medical knowledge base and clinical assessment skills.	1 credits
PAS630	Topics in Clinical Medicine An intensive review in preparation for entering practice as a physician assistant. A series of special seminars and presentations that provides the student with a topical approach to medicine.	3 credits
PAS635	Healthcare Policy Students explore relevant health-care law and policy issues that impact the Physician Assistant profession and health-care delivery systems. Instruction is provided through classroom discussions, guest lectures, and small group problem-based learning.	1 credits
PAS636	Program to Practice This course assists students with the transition of becoming a clinically practicing physician assistant. The course will provide information on how to prepare for the new career, including obtaining certification, licensure, malpractice insurance, and other essential items needed before they begin practicing.	1 credits
PAS637	Clinical Skills for the Physician Assistant I This skills-based course will cover history, physical examination, documentation of patient data and diagnostic aspects of the head and neck, integumentary, lymphatic, musculoskeletal, pulmonary and cardiac systems. History taking will also be introduced. Course format will include lectures, demonstrations, online simulation modules, and	4 credits

high-fidelity simulation.

PAS638	Clinical Skills for the Physician Assistant II This skills-based course will cover history, physical examination, and documentation of patient data and diagnostic aspects of the abdominal, genitourinary, and neurologic examinations. The comprehensive patient examination will also be covered. Course format will include lectures, demonstrations, online simulation modules, and high-fidelity simulation. Pre-requisites Complete the following course: <ul style="list-style-type: none">• PAS637 Clinical Skills for the Physician Assistant I	4 credits
PAS640	Clinical Experience I These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits
PAS641	Clinical Experience II These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits
PAS642	Clinical Experience III These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits
PAS643	Clinical Experience IV These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits
PAS644	Clinical Experience V These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits
PAS645	Clinical Experience VI These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.	3 credits

PAS646	Clinical Experience VII	3 credits
<p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>		
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PAS647	Clinical Experience VIII	3 credits
<p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>		
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PAS648	Clinical Experience IX	3 credits
<p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>		

2022-2023 Course Catalog

Master of Professional Writing

Chatham University's Master of Professional Writing (MPW) program is a broad-based course of study that leads to a unique, professional degree. Students will explore the practice of writing in a variety of professional contexts, including technical writing, political writing, business and financial writing, writing for electronic media, web design, and critical writing. By bringing together students from a variety of different backgrounds, the MPW program offers an educational experience that more accurately reflects the realities of today's shifting and expanding business world.

The MPW program consists of 30 credits completed in the online format. Students will gain experience working in a variety of business formats and will be prepared to assume positions that demand highly-developed communication skills. Chatham University's MPW program allows students to complete a focused Professional Writing Degree or to pursue a concentration in Web-Content Design or Technical Writing.

Admission Requirements

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Learning Outcomes

4. Professional Practice

- Students must develop projects with an understanding of a diversified audience.
- Students must properly document their projects, choosing appropriate forms of media.
- Students must have an understanding of relevant journals, festivals, firms, etc. for later distribution or field contribution.
- Students must develop field-appropriate professional portfolios and be able to communicate their projects clearly.
- Students must develop attitudes of professional responsibility and accountability.
- Students must develop professional discipline (time-management, organizational skills).

Curriculum

Degree Requirements

30 credits

•	<p>PWR601 Introduction to Professional Writing</p> <p>This foundational course is designed as an introduction to professional writing genres, models, standards, and formats of the online Master of Professional Writing degree. The course features practical writing and editing experience in a collaborative work environment. The class will establish a basic level of writing skills among MPW students and will begin with the development, or enhancement, of students' skills in analysis, synthesis, summarizing, and expository writing. In the latter part of the course, students focus on the techniques that make professional writing flow and hold the reader's interest. A workshop approach helps beginning writers learn to craft their work so that it reads smoothly and communicates effectively. Topics include creating leads that command interest, developing a story idea without floundering, making graceful and unobtrusive transitions, enriching the theme, and perfecting the ruthless art of self-editing. Students write short essays and critique their own published work.</p>	3 credits
	<p>PWR699 Professional Writing Portfolio</p> <p>This course must be taken as each student's last course in the MPW program. This capstone course is a self-directed, guided independent practicum in which the student will produce a written project to the specifications of a "client" in one of the disciplinary areas of study. At the same time, students will have the opportunity to participate in a workshop-style program in which they will analyze the editorial and communication interests of various consumers of writing services (corporate communication offices, magazines, online venues, etc.). The workshop will explore many areas of the business of being a writer and cover copyright and contracts, cover and query letters, standard business practices - and strategies for success.</p>	3 credits
Choose 24 credits from:		
	<p>PWR606 Grant Writing</p> <p>This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.</p>	3 credits
	<p>PWR616 Technical Writing</p> <p>This course teaches students how to prepare letter reports and technical reports about subjects that require technical explanations, diagrams, charts, and jargon understood by technical readers. In addition, this course teaches students how to present technical information to technical readers so they understand the concepts and can apply them in their work.</p>	3 credits
	<p>PWR617 Teaching Technical Writing</p> <p>This course prepares the student to seek technical writing training and teaching positions, as well as pursue subsequent doctoral studies in professional writing. Topics covered include best-practices in teaching, as well as developing course objectives and syllabi. Professional journal publishing and curriculum vita preparation will also be presented.</p>	3 credits

PWR620	Political and News Writing Political and News Writing	3 credits
PWR621	Use of New and Social Media This course seeks to give students the skills and confidence to create interesting and informative digital presentations based on simple presentation design and delivery options. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	3 credits
PWR625	Business and Organizational Writing This course teaches students the rhetorical principles and writing practices necessary for producing effective business letters, memos, reports, and collaborative projects in professional contexts. All sections are offered in networked computer classrooms to ensure that students taking the course are prepared for the writing environment of the 21st century workplace. The course teaches the rhetorical principles that help students shape their business writing ethically, for multiple audiences, in a variety of professional situations. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	3 credits
PWR632	Science and Environmental Writing This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.	3 credits
PWR641	Financial Writing This course is concerned with the communication of financial information in writing: How should financial professionals construct documents? What are the writing techniques needed to make the numbers tell their own story? Topics include genres of financial writing (reports, presentations, correspondence), successful writing strategies (audience analysis, grammar usage, information gathering), organizing information, and using tables and charts.	3 credits
PWR662	Writing for Digital Media This class will prepare students to enter these fields by teaching the strategies and skills needed to make compelling interactive experiences. Specifically, students will focus on developing their abilities to conceptualize, design, and create multimedia applications. Areas of focus will include: strategies for understanding and documenting audience needs and expectations; basics of effective user interface design; and typical process and artifacts involved with multimedia application development.	3 credits

PWR670	Principles of Information Architecture	3 credits
	In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	
PWR673	Web Design and Development I	3 credits
	This course will provide an introduction to the technical skills needed for designing on-line content and interactive multimedia. Current multimedia tools for use in creating web-based products will be taught with ample opportunity for practice. Students learn authoring tools and multimedia techniques while covering topics, including non-text-based communication, integration of visuals, the animation of text and graphics, and digital video web-deployment.	
PWR674	Web Design and Development II	3 credits
	A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.	
PWR675	Visual and Interface Design	3 credits
	Students will use audience analysis to help develop wireframes and storyboards, progress to full interface design, as well as gain an appreciation for the basic elements of design and how content is an integral part of design. Students will focus on interactions and behaviors. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	
PWR694	Client Project	3 credits
	This required course for the Web Content Development concentration includes working on a client project for a real business customer. Students learn to develop statements of work, client agreements, and gain experience with direct application of web content development principles.	

Web Content Development Concentration

As we move increasingly toward an experience economy that values the overall feel as much as – or more than – the good or service itself, content design roles are growing in demand. Additionally, as Web 2.0, social media, and community content authoring have become ubiquitous, the danger of information pollution threatens to overwhelm content consumers. Businesses are driven to hire skilled professionals to architect their content in a consumable, usable manner. The MPW Web Content Development concentration will focus on the many aspects of professional writing centered on developing content for the web, from architecting to writing, teaching students to do more than craft the written word. Students will adopt a highly user-focused approach to content development, from user-story creation through digital media development, as students learn the new media skills needed

in this modern digital age. This concentration also requires a portfolio and networking-enhancing client project that gives students direct opportunities to apply their skills to a real-life business project. The MPW Web Content Development concentration will enable students to take their skills straight to the market place.

- 2 core courses

PWR601	Introduction to Professional Writing	3 credits
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This foundational course is designed as an introduction to professional writing genres, models, standards, and formats of the online Master of Professional Writing degree. The course features practical writing and editing experience in a collaborative work environment. The class will establish a basic level of writing skills among MPW students and will begin with the development, or enhancement, of students' skills in analysis, synthesis, summarizing, and expository writing. In the latter part of the course, students focus on the techniques that make professional writing flow and hold the reader's interest. A workshop approach helps beginning writers learn to craft their work so that it reads smoothly and communicates effectively. Topics include creating leads that command interest, developing a story idea without floundering, making graceful and unobtrusive transitions, enriching the theme, and perfecting the ruthless art of self-editing. Students write short essays and critique their own published work.

PWR699	Professional Writing Portfolio	3 credits
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This course must be taken as each student's last course in the MPW program. This capstone course is a self-directed, guided independent practicum in which the student will produce a written project to the specifications of a "client" in one of the disciplinary areas of study. At the same time, students will have the opportunity to participate in a workshop-style program in which they will analyze the editorial and communication interests of various consumers of writing services (corporate communication offices, magazines, online venues, etc.). The workshop will explore many areas of the business of being a writer and cover copyright and contracts, cover and query letters, standard business practices - and strategies for success.

5 concentration courses

PWR662	Writing for Digital Media	3 credits
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This class will prepare students to enter these fields by teaching the strategies and skills needed to make compelling interactive experiences. Specifically, students will focus on developing their abilities to conceptualize, design, and create multimedia applications. Areas of focus will include: strategies for understanding and documenting audience needs and expectations; basics of effective user interface design; and typical process and artifacts involved with multimedia application development.

PWR670	Principles of Information Architecture	3 credits
	In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	
PWR674	Web Design and Development II	3 credits
	A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.	
PWR675	Visual and Interface Design	3 credits
	Students will use audience analysis to help develop wireframes and storyboards, progress to full interface design, as well as gain an appreciation for the basic elements of design and how content is an integral part of design. Students will focus on interactions and behaviors. Pre-requisites Complete the following course: PWR601 Introduction to Professional Writing	
PWR694	Client Project	3 credits
	This required course for the Web Content Development concentration includes working on a client project for a real business customer. Students learn to develop statements of work, client agreements, and gain experience with direct application of web content development principles.	

Note: Basic web design skills, including raw HTML and CSS coding, are a required prerequisite to PWR 674. We strongly recommend completing PWR 673 Web Design I, and consider it a required course for the concentration if the student does not already possess these skills. Contact the Program Director or the current instructor for PWR 674 with any questions about meeting this requirement.

3 electives courses

Technical Writing Concentration

As everyday practices and corporate technologies grow ever more complex, there is a growing need for technical writers who can cut through the jargon and extract the essence of ideas. Through a combination of writing and design skills, technical writing takes complex technical information and presents it simply for multiple audiences. Technical writers are employed in a wide variety of fields, including science, technology, medicine, robotics, sustainability, education, and finance. Because of the high demand for jobs, employers are able to be very specific in their requirements for employees, and technical writers with specialty training gain a competitive advantage in the marketplace.

The MPW Technical Writing concentration introduces key skills in Technical Writing and Editing, and then allows students to apply these fundamental skills in content courses such as Science &

Environmental Writing and Grant Writing. Because so many technical writers train others in best practices, the program's Teaching Technical Writing course helps students develop as facilitators of learning for the craft of technical writing. In the final semester, students will have the opportunity to develop a professional portfolio and work on real projects for local clients.

2 core courses

PWR601	Introduction to Professional Writing	3 credits
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This foundational course is designed as an introduction to professional writing genres, models, standards, and formats of the online Master of Professional Writing degree. The course features practical writing and editing experience in a collaborative work environment. The class will establish a basic level of writing skills among MPW students and will begin with the development, or enhancement, of students' skills in analysis, synthesis, summarizing, and expository writing. In the latter part of the course, students focus on the techniques that make professional writing flow and hold the reader's interest. A workshop approach helps beginning writers learn to craft their work so that it reads smoothly and communicates effectively. Topics include creating leads that command interest, developing a story idea without floundering, making graceful and unobtrusive transitions, enriching the theme, and perfecting the ruthless art of self-editing. Students write short essays and critique their own published work.

PWR699	Professional Writing Portfolio	3 credits
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This course must be taken as each student's last course in the MPW program. This capstone course is a self-directed, guided independent practicum in which the student will produce a written project to the specifications of a "client" in one of the disciplinary areas of study. At the same time, students will have the opportunity to participate in a workshop-style program in which they will analyze the editorial and communication interests of various consumers of writing services (corporate communication offices, magazines, online venues, etc.). The workshop will explore many areas of the business of being a writer and cover copyright and contracts, cover and query letters, standard business practices - and strategies for success.

5 concentration required courses:

PWR606	Grant Writing	3 credits
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This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.

PWR616	Technical Writing	3 credits
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This course teaches students how to prepare letter reports and technical reports about subjects that require technical explanations, diagrams, charts, and jargon understood by technical readers. In addition, this course teaches students how to present technical information to technical readers so they understand the concepts and can apply them in their work.

PWR617	Teaching Technical Writing	3 credits
	This course prepares the student to seek technical writing training and teaching positions, as well as pursue subsequent doctoral studies in professional writing. Topics covered include best-practices in teaching, as well as developing course objectives and syllabi. Professional journal publishing and curriculum vita preparation will also be presented.	
PWR632	Science and Environmental Writing	3 credits
	This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.	
PWR694	Client Project	3 credits
	This required course for the Web Content Development concentration includes working on a client project for a real business customer. Students learn to develop statements of work, client agreements, and gain experience with direct application of web content development principles.	

3 electives courses

Master of Science in Athletic Training

The curriculum for the M.S in Athletic Training adds to the foundational coursework from the undergraduate major in Exercise Science. This professional degree combines coursework in the clinical assessment and treatment of athletes with courses that emphasize the critical appraisal of the athletic training literature, healthcare delivery and management and sport psychology in addition to clinical education.

Admission Requirements

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale.

Learning Outcomes

Goals

- To educate athletic trainers who are qualified to practice in an ethical, legal, safe and effective manor
- To educate athletic trainers who demonstrate critical thinking and clinical decision making skills based on the application of scientific evidence
- To educate athletic trainers who provide comprehensive care in the areas of prevention/screening, evaluation and diagnosis, immediate and emergency care, treatment and rehabilitation
- To educate athletic trainers who demonstrate professionalism, altruism, advocacy and the ability to work as an effective Interprofessional member of a healthcare team

Outcomes

At the completion of the program the graduate will:

- Apply principles of evidence-based clinical decision making in the examination, diagnosis and treatment of athletes
- Practice in a collegial/interprofessional manner that demonstrates cultural sensitivity and competence with individual athletes
- Demonstrate proficiency in the acute and emergency care of athletes.
- Demonstrate proficiency in the screening, examination and therapeutic treatment of athletes
- Apply concepts of prevention and health promotion in the care of athletes
- Demonstrate effective written, oral and nonverbal communication skills with athletes, members of the healthcare team and relevant stakeholders
- Apply principles of healthcare administration and delivery in a manner that complies with the legal, ethical and regulatory systems

- Advocate for the profession, patient/clients and relevant communities in the public and legislative domains
- Develop professional self-assessment skills and formulate a career development plan

Curriculum

Undergraduate

BIO143	The Cell This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3 credits
BIO143L	Lab: The Cell Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.	1 credits
BIO144	The Organism This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.	3 credits
BIO144L	Lab: The Organism Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.	1 credits
CHM102	Chemistry in Context One semester lecture course with selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological and environmental issues. Topics include matter, energy, atomic and molecular structure, bonding, reaction chemistry, and radioactivity. Three hours of lecture per week. Not open to majors in biology or chemistry.	3 credits
CHM102L	Chemistry in Context Lab One semester laboratory course to accompany CHM102 Chemistry in Context. Two hours of lab per week. Not open to majors in biology or chemistry.	1 credits

PSY101	<p>General Psychology</p> <p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>	3 credits
MTH110	<p>Elementary Statistics</p> <p>Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.</p>	3 credits
BIO201	<p>Anatomy</p> <p>This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week.</p> <p>Pre-requisites Complete all 2 of the following courses: BIO143 The Cell BIO144 The Organism</p>	3 credits
BIO201L	<p>Lab: Anatomy</p> <p>Laboratory experiments emphasizing comparative anatomy between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete all 2 of the following courses: BIO143 The Cell BIO144 The Organism</p>	2 credits
BIO302	<p>Physiology</p> <p>This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.</p> <p>Pre-requisites Complete the following course: BIO201 Anatomy</p>	3 credits
BIO302L	<p>Physiology Lab</p> <p>Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.</p> <p>Pre-requisites Complete the following course: BIO201L Lab: Anatomy</p>	2 credits

EXS101	Introduction to Exercise Science	1 credits
<p>This course is designed to provide an overview of the field of exercise science as a discipline and profession. Students will be exposed to methods and techniques employed to develop positive attitudes and habits that support an active lifestyle. Topics of health risk factors and wellness will be explored as they specifically relate to exercise. Possible career choices related to this field will also be discussed.</p>		
EXS252	Exercise and Nutrition	3 credits
<p>This course introduces the student to the science of human nutrition and the relationship between health, exercise and food intake. Basic topics of digestion, absorption, metabolism, interaction and functions of nutrients will be covered. Special topics emphasized in this course include optimal nutrition for exercise and sport, energy use during exercise, evaluation of body composition (body fat, muscle mass), development of obesity, weight management, and nutritional factors in planning a successful muscular strength and endurance program.</p>		
EXS302	Principles of Strength and Conditioning	3 credits
<p>Students learn to integrate anatomical and physiological function into a comprehensive strength and conditioning model. Topics include testing, evaluation, exercise techniques, program design, and aerobic endurance training. Students are introduced to facility organization, risk management, and developing a policies and procedure manual.</p> <p>Pre-requisites Complete any 1 of the following courses: BIO201 Anatomy BIO116 Basic Anatomy and Physiology I with Lab</p>		
EXS345	Kinesiology and Movement Science	3 credits
<p>This course serves as an introduction to kinesiology and movement science of the human body. The student will learn the functional anatomy and biomechanics of the major joints of the human body and the application of kinesiology and biomechanical principles to describe and analyze normal and pathological human movement. Principles and practical application of motor learning, motor control and skill acquisition will also be introduced. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of lecture per week.</p> <p>Pre-requisites Complete any 1 of the following courses: BIO201 Anatomy BIO116 Basic Anatomy and Physiology I with Lab Co-requisites</p> <ul style="list-style-type: none"> • EXS345LW Lab: Kinesiology and Movement Science 		
EXS326	Applied Exercise Physiology I	3 credits
<p>This course provides students with the knowledge of theoretical and applied aspects of exercise physiology with an emphasis on exercise response and exercise testing. An in-depth understanding of how the body responds when exposed to acute bouts of exercise will be provided through lectures and laboratories. Topics discussed will include physiological adaptations of the cardiovascular, respiratory, metabolic, and neuromuscular systems in response to exercise, and assessment of aerobic endurance, muscular fitness and body composition. Three hours of lecture per week. CPR and first aid certifications are required.</p> <p>Pre-requisites Complete any 1 of the following courses: BIO201 Anatomy BIO116 Basic Anatomy and Physiology I with Lab</p>		

EXS326L	Lab: Applied Exercise Physiology I	1 credits
Experiments to complement the material presented in EXS326. Two hours of laboratory per week. Corequisite: EXS 326. Additional fee(s): Laboratory fee.		
Co-requisites		
<ul style="list-style-type: none"> • EXS326 Applied Exercise Physiology I 		
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EXS426	Applied Exercise Physiology II	3 credits
This course provides students with the knowledge of theoretical and applied aspects of exercise physiology and wellness. The emphasis of this course is on the physiological adaptations to exercise training. Students will learn how to design exercise prescriptions for typical adult populations, athletic populations, and special populations (i.e. pediatric, geriatric, and obese). Three hours of lecture per week.		
Pre-requisites Complete all 2 of the following courses: EXS326 Applied Exercise Physiology I EXS326L Lab: Applied Exercise Physiology I		
AND		
EXS426L	Applied Exercise Physiology II Lab	1 credits
The emphasis of this lab is on the physiological adaptations to exercise training. Students will learn how to design exercise prescriptions for typical adult populations, athletic populations, and special populations (i.e. pediatric, geriatric, obese). Three hours of laboratory per week. Corequisite: EXS 426. Additional fee(s): Laboratory fee.		
OR		
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EXS490	Integrative Capstone	3 credits
The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.		
Pre-requisites Complete the following course: EXS301W Introduction to Critical Research Appraisal		

INTEXS303	Internship - Exercise Science Internship - Exercise Science	3 credits
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OR

ATH512	Clinical Experience in Athletic Training I This course is designed to allow students to review and demonstrate lower extremity and lumbar spine injury evaluations, foundational athletic training skills, modality implementation and emergency management techniques through the completion of a 12-week clinical education experience of approximately 240 clinical hours.	3 credits
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Graduate Athletic Training

ATH500	Prevention and Care of Emergency Medical Conditions This course will teach athletic training students recognition, evaluation, and treatment of emergent medical conditions. This will include basic skills required for injury prevention, treatment and recovery as it relates to physically active populations.	3 credits
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ATH501	Therapeutic Modalities This course educates and expands on theories and application of therapeutic modalities utilized in athletic training. Focus includes clinical decision making and evidence based utilization of modalities in pain modulation and treatment of acute and chronic conditions. Co-requisites • ATH500 Prevention and Care of Emergency Medical Conditions	4 credits
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ATH502	Introduction to Professional Practice This course will introduce athletic training students to various aspects of professional practice as it relates to athletic training including historical aspects of the profession, ethics, documentation and collaboration with other healthcare professions to optimize patient outcomes.	2 credits
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ATH503	Orthopedic and Neurologic Assessment I This course teaches athletic training students a systematic evaluative process including techniques involved in the assessment of orthopedic and neurological conditions of the lower extremity, pelvis, and lumbar spine.	4 credits
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ATH504	Orthopedic and Neurologic Assessment II This course teaches athletic training students a systematic evaluative process including techniques involved in the assessment of orthopedic and neurological conditions of the upper extremity, torso, head, thoracic, and cervical spine. Pre-requisites Complete the following course: ATH503 Orthopedic and Neurologic Assessment I	4 credits
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ATH505	Medical Management of an Athletic Population This course teaches recognition, evaluation, management, and treatment of non-orthopedic medical conditions that affect physically active populations. Pre-requisites Complete the following course: ATH503 Orthopedic and Neurologic Assessment I	3 credits
ATH506	Therapeutic Interventions I Theories, concepts and psychomotor skills in the appropriate application and utilization of therapeutic exercise in the rehabilitation of musculoskeletal injuries. Pre-requisites Complete the following course: ATH503 Orthopedic and Neurologic Assessment I	4 credits
ATH507	Therapeutic Interventions II Students acquire a scientific and physiological rationale, selection criteria, indications and contraindications of exercise, and return to activity guidelines. Techniques and skills provided in both classroom and lab experiences will address range of motion, strengthening, proprioception, cardiovascular fitness, joint-specific and sport specific protocols. Pre-requisites Complete the following course: ATH506 Therapeutic Interventions I	4 credits
ATH508	Pharmacology in Athletic Training The purpose of this course is to provide an overview of drugs commonly used to treat patients seen by persons working in health science professions. Medical reasons for drug treatment, pharmacokinetics and pharmacodynamics of various medications, and adverse effects are presented. Specifically emphasized are drugs affecting the musculoskeletal, cardiovascular, nervous, endocrine, and gastrointestinal systems. Pre-requisites Complete the following course: ATH505 Medical Management of an Athletic Population	2 credits
ATH509	Research Seminar I This course will introduce the fundamentals of research design and interpretation, including basic statistical analysis. Students will identify, locate and appraise current literature related to athletic training and determine how it applies to clinical practice.	1 credits
ATH510	Research Seminar II This course will introduce the fundamentals of qualitative research design and other topics including disablement models, clinical prediction rules, patient oriented outcomes. Students will gain an understanding of qualitative research and its applicability in the Athletic Training profession.	1 credits

ATH511	Research Seminar III	1 credits
	This course will promote student analysis and summary of quantitative research as it relates to athletic training. Students will develop a research question, search literature, summarize and make evidence based clinical recommendations stemming from their research.	
ATH512	Clinical Experience in Athletic Training I	3 credits
	This course is designed to allow students to review and demonstrate lower extremity and lumbar spine injury evaluations, foundational athletic training skills, modality implementation and emergency management techniques through the completion of a 12-week clinical education experience of approximately 240 clinical hours.	
ATH513	Clinical Experience in Athletic Training II	3 credits
	This course is designed to allow students to develop clinical proficiency in the evaluation, diagnosis, and treatment of upper extremity dysfunction, demonstrate therapeutic exercise and modality applications through the completion of a 15-week clinical education experience of approximately 240 hours.	
ATH514	Clinical Experience in Athletic Training III	2 credits
	This course is designed expose students to common non-orthopedic medical conditions present in physically active patients across the lifespan. Students will complete experiences collaborating with other health care providers in local primary or urgent care clinics through the completion of an 8- week clinical education experience approximately 160 hours.	
ATH515	Clinical Experience in Athletic Training IV	4 credits
	This course is designed develop and enhance the practical skills and knowledge necessary for clinical practice, develop student clinical proficiency in all areas of the athletic training profession and facilitate increasing levels of autonomous practice through completion of a student selected 10-week fully immersive clinical education experience approximately 320 hours.	
ATH516	Clinical Experience in Athletic Training V	3 credits
	This course is designed to develop and enhance the practical skills and knowledge necessary for clinical practice, develop student clinical proficiency in all areas of the athletic training profession and facilitate increasing levels of autonomous practice through completion of a student selected 10-week immersive clinical education experience approximately 240 hours.	
ATH517	Administration and Management	3 credits
	This course will address administration responsibilities, policies, and procedures as they relate to the athletic training profession. Focus will be placed on legal and ethical practices, budget, record keeping, facility design and budget as well as job seeking, and interview skills.	

ATH518	Optimizing Athletic Performance	3 credits
	This course explores the concepts of assessing, designing, and implementing specialized performance programs to address the health and performance goals of the athletes. The primary focus is on movement instruction, nutrition, energy systems, program design and concepts of strength and conditioning.	
ATH519	Advanced Topics in Athletic Training	3 credits
	This course provides students the opportunity to examine advanced issues that shape the athletic training profession through practical application and professional development. Emphasis is placed on surgical techniques, radiological concepts and interpretation, laboratory reports, interpreting imaging, and lifespan issues and advanced treatment procedures used in diverse settings.	
ATH520	Certification Preparation Course	1 credits
	This course is designed to prepare students for the Board of Certification Examination and for becoming licensed to practice as an athletic trainer. Through the use of self-assessments, students will identify areas of strengths and weaknesses, create tailored study plans, and complete practice examinations.	
ATH521	Advanced Sports Nutrition	3 credits
	This course discusses scientifically founded sports nutrition including macro nutrients, energy expenditure in sport and exercise, dietary requirements pre-activity, during and post activity, ergogenic aids and nutritional supplements in a variety of active populations. Various diets and their implications/impact on the body will also be discussed.	
ATH522	Healthcare Delivery	3 credits
	This course will discuss the historic development, organization and characteristics of health care delivery systems, payment and reimbursement systems, accrediting agencies applicable to athletic training, organizational patterns of health care facilities, medical staff organization and bylaws; and the athletic training profession from its initiation to the present and future.	
PSY530	Introduction to Sport and Exercise Psychology	3 credits
	This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.	

2022-2023 Course Catalog

Master of Science in Biology (MS)

In many professions, the master's degree is now the minimum requirement for either employment or advancement. To meet this need, Chatham has developed two options for the MS biology program. The non-thesis option can be completed in one calendar year, and different tracks are available focusing on different areas of biology. The thesis option includes a research component and typically takes one and a half to two years.

Non-Thesis Option:

The MS Biology non-thesis track is flexible program that allows student to pursue interests in varied biological disciplines. Scientific inquiry is an essential component of this program, but not at the level of research required for a thesis. Students will complete a total of thirteen courses (36-40 credits) in their degree plan.

Thesis Option:

The MS Biology thesis track is flexible program that allows student to pursue interests in varied biological disciplines. Scientific research is an essential component of this program, which students can expect will require two years to complete. Students complete thirteen courses (36-40 credits) in their degree plan.

The focal point of the program is human biology. This program is designed primarily for students who wish to improve their credentials and/or complete requirements for advanced programs in medicine, dentistry, pharmacy, optometry, etc.

Important Program Information:

In the MS Biology graduate program, you must be registered for a minimum of 9 credits per long semester (i.e. fall & spring) to achieve full-time status. 6 credits is generally sufficient to qualify for financial aid during the summer semester; please check with the financial aid office to confirm the requirements of your funder. Thesis track students cannot register for an independent study intended for research, in addition to thesis credits.

You may count one internship or independent study course (2-3 credits) as an elective in this program. Internships require 40 hours of on-site activity per credit, as well as additional academic responsibilities. It is the student's responsibility to identify the site and the internship supervisor. Chatham's Career Services department and your academic advisor will provide assistance and complete details on academic internship rules and responsibilities.

All BIO classes at the 500- and 600-levels not designated as core courses in the program may serve as approved program electives. Graduate level courses in other academic programs may also be accepted as program electives. A list of pre-approved courses is provided below. Other courses may be approved on an individual basis if they are consistent with the structure of the biology program, and well suited to the specific aims of the student. Full-time students may cross-register for ONE course per semester at nearby institutions including Pitt, CMU, and Duquesne. Cross-registration is not permitted in the summer. These courses are not automatically accepted, so please consult with your program director when pursuing this option.

Admission Requirements

If a Student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.

Learning Outcomes

- Goal 1 Enhances students' intellectual growth and development of practical and transferable skills.
 - PSLO 1 Students demonstrate knowledge and skills in human biology.
- Goal 2 Create a venue for students to gain transferable scientific skills to assist them in their future career endeavors.
 - PSLO 2 Students demonstrate knowledge and skill in research principles, research ethics, and scientific writing.
 - PSLO 3 Students demonstrate knowledge and skill in analysis of biological data.
- Goal 3 Enhance the transferable skills of students along specific intra-discipline lines, including research and biomedical training.
 - PSLO 4 Thesis track students demonstrate mastery of the scientific method
 - PSLO 5 Thesis track students demonstrate skill in oral communication of scientific research
 - PSLO 6 Medical track students demonstrate interdisciplinary skill in the Medical College Admissions Test

Curriculum

MS Biology Thesis Requirements

The MS Biology thesis track is a flexible program that allows student to pursue interests in varied biological disciplines. Scientific research is an essential component of this program, which students can expect will require two years to complete. Students complete thirteen courses (36-40 credits) in their degree plan.

BIO532	Biostatistics	3 credits
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The study and application of biostatistics and probability distributions in biology, for students who already have a working knowledge of statistics and want to understand the place and application of biostatistical methods in science. Topics include hypothesis testing, analysis of variance for one and many variables, and linear and nonlinear regression. Three hours of class per week.

BIO630	Biological Research Principles This course provides students with a foundation in biological research principles, covering ethics, professional development, writing, research design, data analysis, and research proposal development. These are essential scientific components for any graduate student in the biological sciences.	3 credits
BIO650	Research Proposal In conjunction with BIO623 Methods of Biological Research, this course provides the tools for writing a valid proposal to do basic or applied research. Students complete a research proposal for approval of scientific inquiry project, as part of their degree requirements. In this course, students will take the steps to clearly outline a research project for BIO693 Independent Study (non-thesis track) or BIO698 Thesis I (thesis track), which requires program approval. This course is taken subsequent to BIO623 Methods of Biological Research. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BIO630 Biological Research Principles	1 credits
BIO698	Biology Thesis I Research in an area of biology. This is the first of two courses that result in a thesis approved by a committee of three faculty members. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BIO650 Research Proposal	3 credits
BIO699	Biology Thesis II Research in an area of biology. This is the second of two courses that result in a thesis approved by a committee of three faculty members. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BIO698 Biology Thesis I	3 credits
4 courses from the following:		
BIO512	Advanced Human Gross Anatomy An in-depth study of both regional gross human anatomic structures & cellular level tissue. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary & reproductive systems. Regional study of the head/neck, trunk, and upper/lower extremities, is accomplished through human cadaver dissection.	3 credits
BIO512L	Advanced Human Gross Anatomy Lab The laboratory compliment to BIO512, this course uses human cadavers to facilitate a deeper appreciation for regional gross human anatomic structures. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary and reproductive systems, via regional study of the head/neck,	2 credits

trunk, and upper/lower extremities.

Co-requisites

- BIO512 Advanced Human Gross Anatomy

BIO514	Advanced Human Physiology An in-depth study of the mechanisms of human body function, emphasizing cells, genetic control of protein synthesis, transport across membranes, contraction and excitation of muscles, the physiology of cardiac muscle, and rhythmical excitation of the normal heart.	3 credits
BIO516	Advanced Neuroscience A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control of movement. Three hours of class per week.	3 credits
BIO516L	Advanced Neuroscience Lab This lab complements the lectures in BIO516, using hands-on laboratory and data collection exercises. It examines nervous system function, emphasizing excitability, synaptic transmission and neuron-target interactions. It also includes a study of integrative neural function in sensory, motor, learning, memory and limbic systems. Two hours of laboratory per week. Co-requisites <ul style="list-style-type: none">• BIO516 Advanced Neuroscience	2 credits
BIO517	Genetics A study of the modern concepts of the gene. Lectures stress theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations.	3 credits
BIO519	Immunology This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week.	3 credits
BIO538	Biochemistry I This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	3 credits

BIO539	Biochemistry II This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	3 credits
BIO558	Histology A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbook, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.	3 credits
BIO561	Pharmacology This course covers the general principles of drug action, including administration, distribution, mechanism, and excretion. Emphasis will be placed on key pharmacological concepts, basic signal transduction pathways and molecular mechanisms. Pharmacology of the nervous, cardiovascular, and endocrine systems as well as the mechanisms of various antimicrobial agents will be considered.	3 credits
BIO612L	Cadaver Dissection Lab This course presents an extensive overview of gross human anatomic structure, through cadaver dissection, emphasizing the thoracic and abdominal viscera, as well as the musculoskeletal and neuromuscular systems. Evident pathologies are highlighted when present. Strong emphasis is placed upon the development of excellent dissection skills and practices. Pre-requisites Complete all 2 of the following courses: <ul style="list-style-type: none"> • BIO512 Advanced Human Gross Anatomy • BIO512L Advanced Human Gross Anatomy Lab 	3 credits
BIO516L	Advanced Neuroscience Lab This lab complements the lectures in BIO516, using hands-on laboratory and data collection exercises. It examines nervous system function, emphasizing excitability, synaptic transmission and neuron-target interactions. It also includes a study of integrative neural function in sensory, motor, learning, memory and limbic systems. Two hours of laboratory per week. Co-requisites <ul style="list-style-type: none"> • BIO516 Advanced Neuroscience 	2 credits

4-5 courses from the MS Biology elective pool; minimum of 11 credits.

MS Biology Non-Thesis Requirements

The MS Biology non-thesis track is flexible program that allows student to pursue interests in varied biological disciplines. Scientific inquiry is an essential component of this program, but not at the level of research required for a thesis. Students will complete a total of thirteen courses (36-40 credits) in their degree plan.

BIO532	Biostatistics The study and application of biostatistics and probability distributions in biology, for students who already have a working knowledge of statistics and want to understand the place and application of biostatistical methods in science. Topics include hypothesis testing, analysis of variance for one and many variables, and linear and nonlinear regression. Three hours of class per week.	3 credits
BIO630	Biological Research Principles This course provides students with a foundation in biological research principles, covering ethics, professional development, writing, research design, data analysis, and research proposal development. These are essential scientific components for any graduate student in the biological sciences.	3 credits
BIO650	Research Proposal In conjunction with BIO623 Methods of Biological Research, this course provides the tools for writing a valid proposal to do basic or applied research. Students complete a research proposal for approval of scientific inquiry project, as part of their degree requirements. In this course, students will take the steps to clearly outline a research project for BIO693 Independent Study (non-thesis track) or BIO698 Thesis I (thesis track), which requires program approval. This course is taken subsequent to BIO623 Methods of Biological Research. Pre-requisites Complete the following course: <ul style="list-style-type: none">• BIO630 Biological Research Principles	1 credits
BIO693	Independent Study Independent Study Pre-requisites Complete the following course: <ul style="list-style-type: none">• XXX123 Permission of Instructor	3 credits
BIO697	Scientific Dissemination This course fulfills a scientific inquiry requirement for the MS Biology program, non-thesis track. Students document and present results from their independent study project, under the guidance of their faculty mentor. The student will complete an independent study report and give a professional public seminar of the study results. Students normally register for this course in the semester following the semester they performed their required independent study project. Pre-requisites Complete the following course:	3 credits

- BIO693 Independent Study

4 courses from the following:

BIO512	Advanced Human Gross Anatomy An in-depth study of both regional gross human anatomic structures & cellular level tissue. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary & reproductive systems. Regional study of the head/neck, trunk, and upper/lower extremities, is accomplished through human cadaver dissection.	3 credits
BIO512L	Advanced Human Gross Anatomy Lab The laboratory compliment to BIO512, this course uses human cadavers to facilitate a deeper appreciation for regional gross human anatomic structures. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary and reproductive systems, via regional study of the head/neck, trunk, and upper/lower extremities. Co-requisites <ul style="list-style-type: none"> • BIO512 Advanced Human Gross Anatomy 	2 credits
BIO514	Advanced Human Physiology An in-depth study of the mechanisms of human body function, emphasizing cells, genetic control of protein synthesis, transport across membranes, contraction and excitation of muscles, the physiology of cardiac muscle, and rhythmical excitation of the normal heart.	3 credits
BIO516	Advanced Neuroscience A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control of movement. Three hours of class per week.	3 credits
BIO517	Genetics A study of the modern concepts of the gene. Lectures stress theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations.	3 credits
BIO519	Immunology This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week.	3 credits

BIO538	Biochemistry I This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	3 credits
BIO539	Biochemistry II This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	3 credits
BIO558	Histology A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbook, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.	3 credits
BIO561	Pharmacology This course covers the general principles of drug action, including administration, distribution, mechanism, and excretion. Emphasis will be placed on key pharmacological concepts, basic signal transduction pathways and molecular mechanisms. Pharmacology of the nervous, cardiovascular, and endocrine systems as well as the mechanisms of various antimicrobial agents will be considered.	3 credits

4-5 courses from the MS Biology elective pool; minimum of 11 credits.

MS Biology Electives Thesis and non-Thesis

BIO508	Developmental Biology A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.	3 credits
BIO517	Genetics A study of the modern concepts of the gene. Lectures stress theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations.	3 credits

BIO518	Chemical Analysis Laboratory	3 credits
	This laboratory teaches the proper design, implementation and analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Additional Fee(s): Laboratory fee.	
BIO519	Immunology	3 credits
	This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week.	
BIO538	Biochemistry I	3 credits
	This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	
BIO539	Biochemistry II	3 credits
	This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.	
BIO552	Computational Drug Design	3 credits
	Study of computational techniques of importance in contemporary drug design. Topics include molecular docking, ligand binding free energy calculations, de novo drug design, pharmacophore elucidation, quantitative structure-activity relations, and combinatorial library design. Cross-listed as BIO 452 and CHM 452.	
BIO553	Special Topics in Biology	3 credits
	Lectures and/or laboratories in selected areas of contemporary biology, with a focus of recent research.	
BIO555	Medical and Bio-ethics	3 credits
	This course will discuss selected topics in medical ethics emphasizing methods of ethical reasoning about moral dilemmas and contributions of philosophical theories and principles to practical problems of medicine. Includes legal aspects of health care decisions.	

BIO558	Histology A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbook, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.	3 credits
BIO561	Pharmacology This course covers the general principles of drug action, including administration, distribution, mechanism, and excretion. Emphasis will be placed on key pharmacological concepts, basic signal transduction pathways and molecular mechanisms. Pharmacology of the nervous, cardiovascular, and endocrine systems as well as the mechanisms of various antimicrobial agents will be considered.	3 credits
BIO601	Professional Development in Biology This course provides students with an opportunity to receive mentorship or practical training in teaching, research, or other professional activity in biology.	1 credits
BIO638	Internship Internship	2 credits
BIO639	Internship Internship	3 credits
FST512	Practical Nutrition Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.	3 credits
HCI502	Healthcare Delivery Systems In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.	3 credits
HCI503	Informatics Foundation and Health Care Technology This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.	3 credits

HCI506	Health Policy and Informatics This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.	3 credits
HCI631	Integrating Technology into a Healthcare Environment This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.	3 credits
PSY503	Applied Biological Psychology The course addresses biological aspects of human psychology, including the biological basis of neurological deficits and mental disorders, and the use psychotropic medications for treating mental illnesses. Topics also include stress and health, mental disorders such as depression, anxiety, and schizophrenia, and contemporary issues in biological psychology.	3 credits
PSY530	Introduction to Sport and Exercise Psychology This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.	3 credits
PSY629	Human Development across the Life Span The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.	3 credits
PSY635	Concepts of Mental Health and Illness The course provides an overview of concepts of mental health and its development, and of the etiologies of psychopathology, from a culturally sensitive perspective. Students learn to recognize the complex biological and environmental contributors to mental illness, and to evaluate effective treatment approaches for mental illness.	3 credits
PSY663	Foundations of Health Psychology Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.	3 credits

PWR616 Technical Writing**3 credits**

This course teaches students how to prepare letter reports and technical reports about subjects that require technical explanations, diagrams, charts, and jargon understood by technical readers. In addition, this course teaches students how to present technical information to technical readers so they understand the concepts and can apply them in their work.

PWR632 Science and Environmental Writing**3 credits**

This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.

Master of Science in Counseling Psychology (MS)

The program focuses on both the professional, intellectual, and personal growth of students, emphasizing human-centered values as well as evidence - informed treatment approaches. The program aims to prepare students to become competent providers of counseling psychology services in the context of a diverse community and the ever-changing healthcare environment.

Successful completion of the counseling psychology courses prepares students for master's level positions in professions promoting the optimal development of individuals, families, groups, and organizations. Graduates of the program will be ready for employment in agencies providing mental and physical health services, social services and other educational, professional, and business organizations. The psychology-based curriculum integrates theoretical foundations, experiential perspectives, and research methodologies with practice. In addition, students learn to assess persons in their familial and social contexts, design strategies for change, and evaluate the effectiveness of those interventions. Students are further encouraged to be mindful of the socio-cultural diversity of individuals, families, and groups.

Admission Requirements

- Completed application for admission, including:

Learning Outcomes

Masters of Counseling and Psychology Accreditation Council 2017 Standards

A. Professional identity, and ethical and professional standards

1. *Ethical/Legal Standards and Policy*: Demonstrates knowledge and application of ethical concepts, and awareness of legal issues regarding professional activities with individuals, groups, and organizations
 - a. Knowledge of ethical, legal and professional standards and guidelines: Demonstrates knowledge and understanding of relevant ethical/professional codes, standards and guidelines, laws, statutes, rules, and regulations
 - b. Awareness and application of ethical decision making: Recognizes situations that challenge adherence to professional values and applies an ethical decision-making model to ethical dilemmas
 - c. Ethical Conduct: Integrates ethical values into professional conduct
2. *Professional Values and Attitudes*: Exhibits behavior and comportsment that reflect the values and attitudes of counseling and psychology
 - a. Evidences adherence to professional values throughout professional work

- b. Demonstrates understanding of counseling and psychological practice as an applied behavioral science
- c. Maintains professionally appropriate communication and conduct across different settings
- d. Assesses personal accountability and accepts responsibility for own actions
- e. Demonstrates concern for the welfare of others
- f. Displays an appropriately defined professional identity

B. Evidence-based theories and practice of counseling and psychotherapy

1. *Knowledge*: Demonstrates knowledge of individual and group theories of counseling and psychotherapy consistent with program orientation and goals

2. *Relationships*: Relates effectively with individuals, groups, and communities
 - a. Forms and maintains productive and respectful relationships with clients, peers/colleagues, supervisors, and professionals from within and across disciplines
 - b. Demonstrates understanding of counseling and psychological practice as an applied behavioral science
 - c. Negotiates differences and handles conflict satisfactorily
 - d. Provides effective feedback to others, receives feedback non-defensively, and integrates feedback appropriately
 - e. Communicates clearly using verbal, nonverbal, and written skills in a professional context; demonstrates clear understanding and use of professional language

3. *Intervention*: Applies evidence-based intervention and prevention strategies designed to alleviate suffering and to promote health and well-being of individuals, groups, and/or organizations (e.g., career, group, family, and/or systems-level interventions)
 - a. Formulates and conceptualizes cases; plans and implements interventions utilizing at least one consistent theoretical orientation
 - b. Displays skills in developing the therapeutic alliance
 - c. Evaluates intervention progress and modifies intervention or prevention strategies on the basis of evaluation of clients' or groups' progress and/or client feedback

C. Multiculturalism and diversity

Demonstrates knowledge, self-awareness, and skills in working with individuals, groups, and communities who represent various cultural and personal backgrounds and characteristics

1. *Knowledge and Self-Awareness*:
 - a. Demonstrates knowledge and awareness of self, as shaped by individual and cultural diversity (e.g., cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status) and context.
 - b. Demonstrates knowledge and awareness of others, as shaped by individual and cultural diversity and context.

2. *Skills*: Applies knowledge of self and others as cultural beings in assessment, treatment, consultation, and all other professional interactions; is able to work effectively with diverse

individuals in assessment, treatment, and consultation.

D. Theories of psychopathology and relevant classification systems

1. Knowledge:

- a. Demonstrates knowledge of theories of psychopathology, including but not limited to, biological and sociocultural theories
- b. Demonstrates knowledge of classification systems of behavior and evaluates limitations of those systems

2. *Skills:* Applies concepts of normal/abnormal behavior to case formulation, diagnosis, and treatment planning in the context of stages of human development and diversity

E. Tests, measurements, and other assessments of behavior

1. Knowledge:

- a. Demonstrates knowledge of content, reliability and validity, and purposes of assessment measures frequently used by counselors and psychological practitioners.
- b. Evaluates strengths and limitations (including cultural limitations) of administration, scoring, and interpretation of assessment measures.

2. *Skills:* Selects and utilizes appropriate assessment measures across domains of functioning, practice settings, and cultural groups.

F. Research methods and program evaluation

1. Knowledge:

- a. Demonstrates knowledge of scientific methods commonly used by counselors and psychology practitioners in their clinical work
- b. Demonstrates knowledge of use of scientific methods to add to the knowledge base of counseling and psychology
- c. Demonstrates knowledge of application of scientific methods to evaluating practices, interventions, and programs

2. *Skills:* Critiques published research effectively

G. Career development and/or the role of work in peoples' lives

1. Demonstrates knowledge of the role of work in peoples' lives

2. Demonstrates understanding of the development of work and career choices across the life span

H. Biological basis of behavior

1. Demonstrates knowledge and understanding of the relationship between biological factors and human functioning

I. Developmental basis of behavior

1. Demonstrates knowledge and understanding of human development, wellness, and learned

bases of behavior across the lifespan.

J. Social/organizational/community basis of behavior

1. Demonstrates knowledge of individuals in the context of their environment and how the environment (e.g., geographical, ideological, demographic, familial, institutional) affects functioning. Demonstrates understanding of the use of systems changes (whether by prevention or intervention) to enhance the functioning of individuals, families, groups, organizations, and/or institutions.

K. Understanding and use of supervision during applied experiences

1. *Knowledge*: Demonstrates understanding of the role and practice of supervision.
2. *Skills*
 - a. Responds appropriately to supervision
 - b. Engages in reflective practices by synthesizing supervisor feedback and experience in applied work
 - c. Engages in appropriate self-care strategies

Curriculum

Degree Requirements

Program of Study (39 credits + 9 credits of field placement = 48 credit hours for MSCP degree)

M.	PSY501 Foundations of Counseling Psychology	3 credits
	The course introduces students to the field of counseling psychology, including the historical roots, current values, and training curriculum. The course also engages students in experiential learning of the theory and practice of basic counseling skills.	
	PSY503 Applied Biological Psychology	3 credits
	The course addresses biological aspects of human psychology, including the biological basis of neurological deficits and mental disorders, and the use psychotropic medications for treating mental illnesses. Topics also include stress and health, mental disorders such as depression, anxiety, and schizophrenia, and contemporary issues in biological psychology.	
	PSY555 Statistics and Research Methods	3 credits
	The course provides a basic review of descriptive and inferential statistics and how these techniques are used with research methods in counseling psychology. Students will become proficient in computer analysis of data sets, designing and evaluating research designs and techniques, and understanding primary research in counseling literature.	

PSY617	Psychology of Culture and Identity	3 credits
	The course addresses issues of culture and identity, as related to counseling and therapeutic relationships. Sociopolitical, socioeconomic, familial, and psychological aspects of diversity, identity, and culture are explored through readings, seminars, and experiential exercises. Students challenge underlying assumptions and develop effective skills to work with diverse populations.	
PSY627	Vocational/Career Counseling	3 credits
	The course addresses the issues involved in the lifelong process of vocational development, through exploration of theories and assessment approaches in career counseling. Additional topics addressed include self-awareness, career awareness and assessment, career decision making and planning, and career implementation.	
PSY629	Human Development across the Life Span	3 credits
	The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.	
PSY642	Assessment	3 credits
	The course covers the basics of psychological assessment. The importance of integrating information from various sources when formulating hypotheses and diagnostic impressions and when developing treatment plans is emphasized. Other topics include interviewing, mental status examinations, psycho-physiological strategies, psychological tests related to various diagnostic groupings, and program evaluation.	
PSY657	Psychopathology & Resilience	3 credits
	The course provides an overview of psychopathology. Students learn to recognize the complex biological, cultural, and environmental contributors to mental illness, and to diagnose mental disorders using standardized criteria. Students will also study the concept of resilience and its role in contributing to health and well-being.	
PSY658	Evidence-Based Practice	3 credits
	This course provides an introduction to evidence-based practice in applied psychology, emphasizing a counseling psychology perspective to understanding human problems. The course focuses on the methodological issues in developing an empirical basis for psychological treatments, and understanding the evidence base for treatment, therapist, client, and therapeutic relationship effects.	

PSY662	Theories and Techniques of Counseling	3 credits
	This course explored a variety of counseling theories and techniques to provide a foundation for the practice of professional counseling from a culturally sensitive perspective. The course emphasizes current professional research and practice related to counseling theories and techniques, and provides opportunities for skill practice.	
PSY672	Group Counseling	3 credits
	The course explores the theory and practice of group experience from the perspectives of a member and observer. Topics include basic elements of group dynamics, interpersonal styles as they affect or hinder group functioning, role identity, leadership style, and application of group skills in organizations.	
PSY674	Foundations of Family Therapy	3 credits
	The course focuses on the evaluation and treatment of psychological symptoms from the perspective of the family and systems theory. The history and evolution of the family movement will be presented and multiple family therapy modalities introduced, with an emphasis on selected theories and applications. Pre-requisites Complete all 2 of the following courses: PSY501 Foundations of Counseling Psychology PSY662 Theories and Techniques of Counseling	
PSY681	Professional Integration Seminar	3 credits
	The course explores ethical conceptualization, analysis, and practices of applied and counseling psychologists. Topics include the ethical standards of the American Psychological Association and the American Counseling Association, the history of applied psychology, and the developing mental health counseling movement. Certification, licensure, and regulatory practices are also discussed.	
Field Placements		
PSY682	Practicum	3 credits
	The course is an entry-level fieldwork course in which students obtain supervised counseling experience. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats.	
PSY685	Supervised Internship I	3 credits
	The course is a supervised field placement experience focusing on integration of theory and practice. The course requires attendance at a weekly seminar on campus, which involves presentations focusing predominantly on assessment, diagnosis, and case conceptualization.	

PSY686	Supervised Internship II	3 credits
<p>The course enhances students' abilities to effectively offer mental health treatment and services to clients. Activities include discussion of issues in contemporary counseling psychology and treatment planning, formal case presentations, and completion of the graduate portfolio.</p> <p>Pre-requisites Complete the following course: PSY682 Practicum</p>		

PSY683 - Special Topics (3)

Licensed Professional Counselor

R.

A total of 60 credit hours is needed to become a licensed professional counselor in PA. Students may take 12 or more credit hours of electives in order to become eligible for the LPC in the Commonwealth of Pennsylvania. Each elective below is 3 credit hours:

PSY530	Introduction to Sport and Exercise Psychology	3 credits
<p>This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.</p>		
PSY602	Sport and Exercise Psychology Interventions	3 credits
<p>Students in this course will become competent in the understanding and application of the core mental skills of sport and exercise psychology across settings and across the lifespan.</p> <p>Pre-requisites Complete the following course: PSY530 Introduction to Sport and Exercise Psychology</p>		
PSY621	Advanced Seminar in Diversity Issues	3 credits
<p>The course further develops the multicultural competency of counselors in relation to specific selected topics related to diversity and counseling. This is an elective course.</p>		
PSY632	Positive Psychology	3 credits
<p>Positive Psychology is the study of how humans do well and flourish. This course is an introduction to positive psychology theories and techniques. Didactic, experiential, and interactive elements will be used to explore concepts, research, interventions, and exercises that positive psychology has contributed to the larger field of psychology.</p>		

PSY645	Environmental Psychology Students will explore concepts, research, and practice related to the interface between environment and psychology. The course emphasizes the effects that environmental and climate change issues have on human health and well-being.	3 credits
PSY663	Foundations of Health Psychology Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.	3 credits
PSY665	Addictions Counseling The course addresses a variety of addiction topics, including chemical dependency, eating disorders, sexual addiction, the chemically dependent offender, and women's issues in addiction. Several treatment models are explored, with emphases on effectiveness of treatment approaches and on multicultural sensitivity.	3 credits
PSY668	Crisis, Trauma and Recovery The course is an introduction to the field of psychological trauma, examining the historical development of trauma as a clinical entity and an overview of theories and strategies for treating trauma. Students will learn to identify and work with their own reactions to clients who present trauma issues.	3 credits
PSY669	Foundations of Expressive Arts Therapy This class explores the use of various expressive art modalities and theoretical approaches, including Eastern traditions, Jungian psychology, and other sources. The student will participate in experiential exercises to further understanding of the expressive arts theories and applications.	3 credits
PSY671	Mindfulness Counseling This course explores mindfulness and acceptance based approaches to counseling and discusses the integration of art and science when utilizing these approaches. Students will examine current research about efficacy of such approaches, and also develop beginning skills in these approaches.	3 credits
PSY673	Couples Counseling This advanced course covers selected theories and techniques related to couples counseling. The emphasis in the course is on practical application of the theories. Pre-requisites Complete all 2 of the following courses: PSY501 Foundations of Counseling Psychology PSY662 Theories and Techniques of Counseling	3 credits

PSY676	Counseling Children and Adolescents The course focuses on issues and concepts related to counseling children and adolescents with social and/or emotional problems. Topics include significant differences between children/adolescents and adults; theories of normal child development and temperament; and conceptualization and effective treatment of problems.	3 credits
PSY677	Grief Counseling The course introduces students to the techniques, strategies, and treatment modalities counselors use to work with adults, children, and families dealing with bereavement. The class focuses on psychological, somatic, cultural, and spiritual aspects of grief and loss. Other topics included are interventions, community resources, and diverse religious and cultural practices.	3 credits
PSY678	Risk and Resilience in Childhood The course covers child/adolescent psychopathology and psychological assessment of children and adolescents. Specific topics include diagnostic and assessment issues specific to children and adolescents; psychological and developmental disorders specific to children and adolescents; and related social and cultural issues.	3 credits
PSY693	Independent Study Independent Study Pre-requisites Complete the following course: XXX123 Permission of Instructor	3 credits

Elective Courses



PSY530	Introduction to Sport and Exercise Psychology This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.	3 credits
PSY602	Sport and Exercise Psychology Interventions Students in this course will become competent in the understanding and application of the core mental skills of sport and exercise psychology across settings and across the lifespan. Pre-requisites Complete the following course: PSY530 Introduction to Sport and Exercise Psychology	3 credits

PSY621	Advanced Seminar in Diversity Issues The course further develops the multicultural competency of counselors in relation to specific selected topics related to diversity and counseling. This is an elective course.	3 credits
PSY632	Positive Psychology Positive Psychology is the study of how humans do well and flourish. This course is an introduction to positive psychology theories and techniques. Didactic, experiential, and interactive elements will be used to explore concepts, research, interventions, and exercises that positive psychology has contributed to the larger field of psychology.	3 credits
PSY663	Foundations of Health Psychology Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.	3 credits
PSY665	Addictions Counseling The course addresses a variety of addiction topics, including chemical dependency, eating disorders, sexual addiction, the chemically dependent offender, and women's issues in addiction. Several treatment models are explored, with emphases on effectiveness of treatment approaches and on multicultural sensitivity.	3 credits
PSY668	Crisis, Trauma and Recovery The course is an introduction to the field of psychological trauma, examining the historical development of trauma as a clinical entity and an overview of theories and strategies for treating trauma. Students will learn to identify and work with their own reactions to clients who present trauma issues.	3 credits
PSY671	Mindfulness Counseling This course explores mindfulness and acceptance based approaches to counseling and discusses the integration of art and science when utilizing these approaches. Students will examine current research about efficacy of such approaches, and also develop beginning skills in these approaches.	3 credits
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PSY677	Grief Counseling The course introduces students to the techniques, strategies, and treatment modalities counselors use to work with adults, children, and families dealing with bereavement. The class focuses on psychological, somatic, cultural, and spiritual aspects of grief and loss. Other topics included are interventions, community resources, and diverse religious and cultural practices.	3 credits
PSY678	Risk and Resilience in Childhood The course covers child/adolescent psychopathology and psychological assessment of children and adolescents. Specific topics include diagnostic and assessment issues specific to children and adolescents; psychological and developmental disorders specific to children and adolescents; and related social and cultural issues.	3 credits
PSY693	Independent Study Independent Study Pre-requisites Complete the following course: XXX123 Permission of Instructor	3 credits
PSY718	Psychology and Sustainability The course presents the interface between environment and sustainability issues and the discipline of counseling psychology. Students review psychological literature about the relationship between environmental problems/solutions and human health and well-being, as well as implications of this for psychologists' work with individuals, families, and communities.	3 credits

Master of Science in Healthcare Informatics (MHI)

Admission Requirements

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Learning Outcomes

Students completing this master's degree will be able to:

1. Demonstrate the skills necessary to integrate technology and use information systems to support evidence-based decision making.
2. Analyze current regulations and practices around healthcare and clinical data.
3. Perform data analysis and report-writing related to both patient and/or system outcomes.
4. Analyze workflow processes in various clinical settings in order to improve the healthcare delivery process.
5. Manage communications and relationships between system developer and interprofessional clinical users to support system and patient outcomes.

Curriculum

Degree Requirements

Students are required to complete 10 courses for a total of 30 credits. Within the 10 courses, students must take seven required courses HCI 504, 505, 507, 631, 651, 583, and 586. Students must select three elective courses from the following list: HCI 502, 503, 506, 525 and 584 (with academic advisor's approval). Each course is a 3-credit course.

HCA 500 Data Literacy and Analytics (3 credits) or HCA 501 Analytics Leader (3 Credits) course, BUT NOT BOTH, is an accepted course option for HCI 502, HCI 503 or HCI 506 within the MHI Graduate Program.

Required Courses:

HCI504	Project Management	3 credits
	Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.	

HCI505	Foundational Data Analytics	3 credits
	<p>This course explores data literacy, visual literacy and how outcomes are dependent upon the integrity of data, the analysis of data and the need for clearly defined report writing. Students will manipulate data for analysis and interpretation in order to effectively conduct and/or contribute to data analytics projects.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • HCI651 Database Management for Evidence-Based Decision Making 	
HCI507	Informatics Immersion	3 credits
	<p>This course leads students to combine management and technical skills to solve real problems regarding healthcare information systems and use of technology in a healthcare setting. The immersion project requires the application of principles in health systems, information technology, healthcare delivery and project management. Students must complete 80-100 internship hours.</p>	
HCI631	Integrating Technology into a Healthcare Environment	3 credits
	<p>This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.</p>	
HCI651	Database Management for Evidence-Based Decision Making	3 credits
	<p>This course will assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>	
HCI583	Virtual Engagement to Improve Health	3 credits
	<p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>	
HCI586	Cybersecurity	3 credits
	<p>Students will explore the cybersecurity needs within a health-related organization's IT infrastructure. Core concepts to be reviewed include cyber frameworks (exploitation, defense, threats etc.), cryptography, malware, and hacking. Students will gain a foundational awareness of the technical and managerial competencies needed to protect and secure database systems and information infrastructures.</p>	

Electives - Choose 3

HCI502	Healthcare Delivery Systems	3 credits
<p>In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.</p>		
HCI503	Informatics Foundation and Health Care Technology	3 credits
<p>This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>		
HCI506	Health Policy and Informatics	3 credits
<p>This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.</p>		
HCI584	Telehealth I	3 credits
<p>This is a foundational course that introduces students to telehealth services. Core concepts to be explored include telecommunications, technology infrastructure, and basic business requirements of implementing a telehealth service. Students will be introduced to designing telehealth encounters that promote health and wellness for both clinicians and consumers.</p>		
HCI525	Advanced Analytics	3 credits
<p>This course builds upon HCI505 by assisting students to advance their knowledge and skills regarding analytical methods. Using tableau, students will obtain a higher level of understanding in applying and manipulating advanced visual analytics while being introduced to machine learning with "R".</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • HCI505 Foundational Data Analytics 		

2022-2023 Course Catalog

Master of Science in Interior Architecture

The Master of Science in Interior Architecture (MSIA) is a 30 credit post-professional degree for students with a first professional degree in interior design or architecture. Students develop a specialization in interior design that can be applied in practice or serve as a foundation for a career in higher education. The program is a recommended platform for students interested in pursuing doctoral studies where they can explore a specific building type, a particular user group, or address a critical design issue.

Program Highlights:

- All incoming students must complete the MSIA Online Orientation in August.
- Students who are taking classes on campus can participate in a supervised teaching experience with an interior design faculty.

Admission Requirements

- [Online application](#)

Learning Outcomes

Students who have completed the Master of Science in Interior Architecture will:

- have the knowledge and skills necessary to think critically
- develop analytical skills
- understand the research process
- engage in research activities that contribute to the body of knowledge in interior design and related professions
- see inquiry as the norm
- demonstrate excellence in writing
- be engaged stewards of the environment (ties in to the institutional mission)

Curriculum

Foundation Courses

Foundation Courses (12 credits) which allow students a foundation for writing their thesis.

IAR655	Immersive Design Research	3 credits
	This graduate seminar is a review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods for gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools, culminating in the development of a research proposal.	
ENG528	Academic Writing	3 credits
	Students develop the writing skills necessary for success in graduate school, including proper citations, time management, and the content and format for two types of research proposals. Students become proficient in the APA style and have the opportunity to resolve grammar and structure problems with the professor.	
IAR680	Thesis Development	3 credits
	The thesis is independently taken by a student under the guidance of a thesis committee. The final project is a written thesis with original research or a creative design project that is supported by in-depth information gathering and written material.	
	Pre-requisites Complete all 4 of the following courses:	
	<ul style="list-style-type: none"> • ENG528 Academic Writing • IAR655 Immersive Design Research • IAR661 Interior Architecture Inquiry • IAR662 Issues in Interior Architecture 	
IAR681	Thesis	3 credits
	The thesis is independently taken by a student under the guidance of a thesis committee. The final project is a written thesis with original research or a creative design project that is supported by in-depth information gathering and written material.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • IAR680 Thesis Development 	

Skills Courses

Skills Courses (12 credits) Students are able to select courses that correspond with their practitioner, scholarship, or teaching career goals.

IAR502	Theory of Interior Architecture	3 credits
	This course cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises including concept development, abstract ideation, physical embodiment, architectural composition and analytical review.	

IAR505	Design and Behavior The designed environment influences and is influenced by human activity patterns and behavior. This course is an introduction to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.	3 credits
IAR510	2D Visual Communications Intended for interior architecture majors or potential majors, this course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding of design thinking and visualization is developed. One-point, two-point, isometric, and axonometric drawing methods will be covered. Additional fee(s): applied art fee.	3 credits
IAR518	Building Codes Students learn and apply relevant building codes as they relate to the health, safety, and life safety of the occupant. This course addresses energy laws, the principles of Universal design, and accessible code compliance. Pre-requisites: IAR520, IAR535	3 credits
IAR519	Drafting and Model Making Intended for interior architecture majors or potential majors. This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding is developed of architectural scale, plans, elevations, and sections. Students will explore three-dimensional model making techniques.	3 credits
IAR520	Architecture Studio II This studio addresses problem identification and problem solving in the context of medium to large-scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, basic elements of 2-D and 3-D design, concept development, space planning, scale, textiles, and color with respect to user needs. Pre-requisites Complete any 1 of the following courses: <ul style="list-style-type: none"> • IAR510 Drafting Studio • IAR510 2D Visual Communications Complete any 1 of the following courses: • IAR519 Drawing and Model Making • IAR519 Drafting and Model Making Complete any 1 of the following courses: • IAR532 Color and Textiles • IAR532 Color and Textiles Studio I 	3 credits
IAR525	Interior Architecture Studio III The studio addresses problem identification and solutions in the context of medium to-large scale projects of complex scope. Emphasis is placed on programming human factors, universal design principles, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs.	3 credits

Pre-requisites Complete all 4 of the following courses:

- IAR502 Theory of Interior Architecture
- IAR515 Digital Visualization II
- IAR520 Architecture Studio II
- IAR535 Construction Methods

IAR530	Interior Materials	3 credits
<p>This course is intended for majors or potential majors and addresses architectural materials and finishes. Students learn to select, specify, and apply architectural finishes. They create specifications, execute take-offs, and produce cost estimates for interior construction. Manufacturing processes, installation methods, maintenance requirements, code regulations, and testing standards are covered.</p>		
IAR532	Color and Textiles Studio I	3 credits
<p>The first part of this residential studio examines theories in color in relation to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.</p>		
IAR535	Construction Methods	3 credits
<p>Intended for interior architecture majors, this course provides an overview of architectural building systems, including exterior and interior construction methods and terminology.</p>		
IAR557	20th & 21st Century Architecture	3 credits
<p>This course is designed to relate the impact of architecture on both public and private spaces throughout the 20th century and provide a view towards the future of architecture in 21st century. The course will guide you through the major styles of architecture of the 20th century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings, and the arts and artists of the day.</p>		
IAR559	History of Interior Architecture	3 credits
<p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>		
IAR610	Digital Visualization III	3 credits
<p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for us in all phases of the design process. Students are instructed to Revit and Sketch-up. Graphic skills are also developed to help students communicate interior design schemes. Additional fees: Course Computing Fee</p>		

IAR615	Construction Documents Studio <p>Construction techniques are studied through the production of a set of construction documents. Issues addressed include the selection and assembly of materials, construction methods, detailing of interior finish systems and cabinetry, building codes, and accessibility. Additional Fees: Course Computing Fees</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IAR525 Interior Architecture Studio III • IAR610 Digital Visualization III <p>Co-requisites</p> <ul style="list-style-type: none"> • IAR620 Interior Architecture III 	3 credits
IAR616	Portfolio <p>This course will allow Interior Architecture students to solidify their professional portfolio for prospective internships and employment. Students will produce a physical and digital portfolio. Additional fees: Course Computing Fee.</p>	3 credits
IAR620	Interior Architecture Studio IV <p>This advanced studio addresses concept development, design development, and detailing of medium-to-large scale projects. Emphasis is placed on program analysis, user needs, universal design, space planning, three-dimensional spatial development, design language, composition, materials and assemblies, color, lighting, acoustics, environmental systems, building codes, and life safety. Additional Fees: Course Computing Fee.</p>	3 credits
IAR630	Construction Systems and Methods <p>This course provides an overview of architectural building systems, including exterior and interior construction methods and terminology as well as environmental control systems, including HVAC, plumbing, fire protection, power distribution, security, building codes, and data/voice telecommunication. Emphasis is placed on energy consumption and conservation, human comfort, and health and safety.</p>	3 credits
IAR631	Design for Sustainability <p>Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.</p>	3 credits
IAR635	Lighting and Acoustics Studio <p>This course is an introduction to lighting and acoustics. Emphasis is placed on the psychology of lighting, visual comfort criteria, measurement and calculations, available technologies in lighting design, the selection of fixtures, and the application of computer aided lighting simulation tools. Principles of acoustics, acoustic properties of materials and building systems in relation to building structures, sound transmission between rooms, and design methods in room and building acoustics are also addressed. Pre- requisites: IAR 525, 515. Additional Fees: Course Computing Fee</p>	3 credits

Pre-requisites Complete all 3 of the following courses:

- IAR515 Digital Drawing
- IAR502 Theory of Interior Architecture
- IAR520 Interior Architecture I

IAR645	Professional Practice	3 credits
<p>In this course, students are introduced to the specialized services provided by the professional interior designer. Emphasis is placed on office operations and personnel issues, marketing strategies, project management, contract documents, ethics, and the legal and financial aspects of professional practice.</p>		
IAR661	Interior Architecture Inquiry	3 credits
<p>This course will introduce students to architectural theory through specific readings that will enable them to establish basic critical reasoning skills utilizing theoretical works. the course will focus on reading and discussing seminal texts while understanding their historical importance to architecture and interior design.</p>		
IAR662	Issues in Interior Architecture	3 credits
<p>Students are introduced to current writings and discussion related to sustainability and globalization, which are then analyzed for their relevance to the decisions made by interior architects. An awareness of current issues and how the student may impact them provides a framework as students engage in research for their thesis.</p>		
IAR670	Supervised Teaching	3 credits
<p>Supervised Teaching</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• XXX123 Permission of Instructor		
BUS511	Health Policy & Advocacy	3 credits
<p>Analyze and synthesize innovative approaches to issues in health care delivery at all levels. Politics, policy, market forces, and advocacy are used to assess how system approaches affect health care delivery. Transformational leadership for political and policy activism are emphasized, while exploring regional, national, and global health issues and trends.</p>		
BUS550	Innovation and Commercialization	3 credits
<p>This course focuses on how to successfully commercialize an innovation. Understanding commercialization activities such as pre-product launch planning, market testing, actual product launch, and post-launch follow-up is a major part of the course. The course provides a run-through of the complete cycle from idea to market entry.</p>		

BUS551	Informatics in Healthcare This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.	3 credits
BUS562	Global Procurement In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.	3 credits
BUS570	Global Business This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.	3 credits
BUS575	Leading Organizations and Projects The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.	3 credits
BUS576	Sustainable Human Capital Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.	3 credits
BUS582	Foundations of Project Management This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.	3 credits
BUS618	Economics for Managers This course teaches how economic tools and techniques can be used to solve business problems. Economics describes why firms do what they do and points to business strategies. The course focuses on economic applications. The course provides an understanding of how economics influences marketing, management, and other	3 credits

business-related decisions.

BUS623	Strategic Performance for Executives	3 credits
	<p>This course will cover issues specific to business leaders such as conflict management, negotiation and persuasion, mentoring structures, crisis communication, and organizational change. Other topics will include implicit and explicit attitude toward authority in the workplace; implicit social cognition; attitudes, self-esteem, and stereotypes, etc.</p>	
BUS639	Sustainability and Assessment Reporting	3 credits
	<p>An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.</p>	
BUS641	Sustainable Supply Chain Management	3 credits
	<p>This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.</p>	
BUS652	Managerial Accounting	3 credits
	<p>This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.</p>	
BUS671	Marketing Management	3 credits
	<p>This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.</p>	
BUS680	Complex Issues in Project Management	3 credits
	<p>Case studies and simulations engage students in the examination of complex issues in project management, such as control, portfolio management, and rescuing failing projects. The Student will be able to analyze, evaluate, and optimize projects in specific environments and industries.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none">• BUS582 Foundations of Project Management	

COM510	Health Communications	3 credits
	Course provides an introduction to the essential concepts and theories of health communication. Students study how individuals understand health issues and how communication processes help shape and influence our acceptance of health-related messages. Topics include health literacy, media coverage of health issues, and health risk communications.	
COM515	Environmental Communications	3 credits
	Course offers an overview of environmental communications providing an analysis of how individuals, institutions and corporations describe and portray our interactions with the environment. Discussion topics include environmental discourse, environmental conflicts, risk communication, environmental disasters, environmental social movements, and the nature-society relationship.	
COM550	Organizational Communications	3 credits
	Course covers current theory and research in the area of organizational communications. Includes formal and informal organizations and public and private organizations. Topics include organizational culture, employee information needs, decision making, leadership and power. Emphasis will be placed on developing the analytical tools to analyze and improve organizational communications.	
ACT573	Business Law and Ethics	3 credits
	This course provides students with a broad-based understanding of legal issues that affect modern businesses. The course covers the following substantive law areas: Choice of Entity, Corporate Governance, Raising Money, Securities Regulation, Bankruptcy, Contracts, Intellectual Property and Employment Law.	
SUS502	Sustainability and Systems	3 credits
	In this course, students will develop skills necessary to understand, describe, and communicate complex systems. Working from examples, exercise and interactive discussions, students will learn to identify key drivers and leverage points for change. Students will learn to solicit useful information, model, and enact change using a various systems-based tools.	
SUS504	Foundations of Sustainability	3 credits
	This course provides students the skills to understand, communicate, and critique the fundamentals of sustainability at multiple scales and across disciplines and cultures. It explores sustainability's origins and foundations, application, and assessment. We evaluate the inter-relationships among environmental, societal, and economic well-being and the implications on individual and social decision-making.	

SUS512	Sustainability in Pittsburgh Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". This course will provide a brief socio-ecological history then will visit various places and people that highlight the diversity in how Pittsburgh is striving to become a model of a sustainable city.	3 credits
SUS516	Sustainable Decision Analysis The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.	3 credits
SUS580	Sustainable Behavior Change This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	3 credits
SUS601	Applied Ecology The overall goal of this course is to examine the role that ecological science contributes to sustainability. Students will critically assess, process evidence, and enhance communication skills for scientific methods. All topics and applications considered will be centered on issues of sustainability in the ecological sciences, such as climate change, water pollution, land use change, and the loss of biodiversity.	3 credits
SUS602	The Political Economy of Sustainability This course will examine the economic dimensions of environmental change through the frameworks of political ecology, political economy, development studies, and sustainability. Through case studies and current theory, we will investigate the costs, benefits, and sustainability of environmental governance. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • SUS502 Sustainability and Systems Complete any 1 of the following courses: • SUS501 Fundamentals of Sustainability • SUS503 Understanding Knowledge Across the Disciplines • SUS504 Foundations of Sustainability 	3 credits
SUS603	Sustainability: Ethics, Equity, Justice This course focuses on the role of the "social" as one of the three pillars of sustainability. It explores historic and contemporary notions of ethics, social equity and social justice. It examines how these concepts can be applied to sustainability by studying local and global case studies.	3 credits

Pre-requisites Complete any 1 of the following courses:

- SUS504 Introduction to Sustainability and Systems
- SUS501 Fundamentals of Sustainability
- SUS503 Understanding Knowledge Across the Disciplines

SUS611	Decision Making Under Uncertainty	3 credits
<p>The application of design principles to data provides a bridge between the increasing volume of information that we encounter everyday to evidence-based, decision-making toward sustainable systems. This course provides a hands-on introduction to data analysis, data visualization techniques, and software for translating complexity and uncertainty into useful products.</p>		
SUS617	Pathways to a Renewable Future	3 credits
<p>This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.</p>		
SUS619	The Water's Edge: Science and Policy from Summit to Sea	3 credits
<p>The water's edge is rich with ecological and cultural activity. Through online discussions, field excursions, public service, participation in research, interactions with practitioners, and a curated exhibit, this course bridges theory with application for the science and policy relevant to the aquatic-terrestrial interface (e.g., streams, rivers, lakes, and coastal shorelines).</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none">• SUS501 Fundamentals of Sustainability• SUS502 Sustainability and Systems		
SUS640	Sustainable Community Development	3 credits
<p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none">• FST508 Food Systems• FST509 Food Access• SUS504 Foundations of Sustainability		
PWR632	Science and Environmental Writing	3 credits
<p>This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the</p>		

public, and interactions between scientists and journalists.

EDU505	Issues of Poverty in Education This course focuses on the characteristics and effects of poverty on education. Definitions and types of poverty are examined. The impact of poverty on cognitive and physical development as well as learning and behavior on individuals is examined. The influences of poverty on classroom and schools is assessed. Strategies to teach students of poverty and combat poverty in schools are discussed.	3 credits
EDU509	Trends and Issues in Early Childhood Education Trends and Issues in Early Childhood Education	3 credits
EDU634	Inclusion: Issues and Strategies This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of its implementation. Students participate in a variety of learning experiences throughout the course.	3 credits
EDU605	Instructing Students With Autism Spectrum Disorders This course is designed to focus on pertinent issues and topics that concern students with autism. Spectrum disorders. This course provides an overview of evidenced-based instructional strategies used to teach students with autism as well as ways to collaborate with individuals in the home, school, and community. Topics will cover specific instructional strategies, family/community relations, behavior, inclusion and transition.	3 credits
EDU606	Adolescent Development and Learning Theory This course addresses physical, social, cognitive, and moral development during adolescence. The physical, social, and cognitive changes during puberty are explored in terms of their impact on student participation and performance in school settings. Through the use of case studies, an understanding of the implications of growth and development on instructional planning for effective learning is achieved.	3 credits
EDU607	Child Development and Learning Theory Focusing on child development from the prenatal stage to age 12, this course emphasizes current research on physical, cognitive, and social development. Students examine the nature of adolescent development, implications of the cognitive and affective characteristics of adolescents in the selection of instructional methods and materials, and structural and organizational features of typical high schools.	3 credits
EDU530	Diverse Family and Community Partnerships Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and	3 credits

emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.

HCI502	Healthcare Delivery Systems In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.	3 credits
HCI503	Informatics Foundation and Health Care Technology This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.	3 credits
HCI504	Project Management Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.	3 credits
HCI582	Project Management II This course emphasizes the concepts/theories/practices in handling the fiscal and leadership responsibilities of project management related to informatics. By the end of this course, students will have developed their Informatics Immersion Project proposal. Students must complete 40 internship hours under the supervision of a mentor in the field of informatics. Pre-requisites Complete the following course: <ul style="list-style-type: none">• HCI504 Project Management I	3 credits
HCI631	Integrating Technology into a Healthcare Environment This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.	3 credits
PSY645	Environmental Psychology Students will explore concepts, research, and practice related to the interface between environment and psychology. The course emphasizes the effects that environmental and climate change issues have on human health and well-being.	3 credits

PSY501 Foundations of Counseling Psychology

3 credits

The course introduces students to the field of counseling psychology, including the historical roots, current values, and training curriculum. The course also engages students in experiential learning of the theory and practice of basic counseling skills.

Electives

Electives (6 credits): Through advising students will select electives to enhance their practitioner, scholarship, or teaching career goals. Choose two graduate-level electives from any program.

2022-2023 Course Catalog

Master of Science in Nursing (MSN)

The Chatham University Nursing Program offers a 33 credit Master of Science Degree in Nursing (MSN). The program prepares students to become world ready nurse leaders, informatics specialists, or educators. The Chatham University MSN program requires 18 credits of MSN Core courses and 15 credits in the Educator, Leadership, or Informatics tracks.

The MSN program at Chatham University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington DC 20001, (202) 463-6930.

Program Structure:

The Chatham University MSN program is delivered as an online program. The program builds on the Bachelor of Science in Nursing foundation by preparing nurses to advance their practice as nurse educators, leaders, or informatics specialist in a variety of settings. Practical experiences are completed at approved practice experience sites with the guidance of an approved preceptor. Full-time and part-time cohorts for each track are admitted each Fall and Spring. An International MSN track is delivered in an on ground format consisting of the 18 core credits and 15 specialty track credits for full-time fall cohorts.

Admission Requirements

- In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?

Learning Outcomes

Upon completion of the program the student will:

- Integrate scientific findings from nursing and other fields for continual improvement of nursing care.
- Synthesize organizational and systems leadership principles to promote high quality and safe patient care.
- Implement quality improvement principles to promote high quality and safe patient care.
- Critique evidence with an understanding of quantitative and qualitative research to guide decision-making.
- Analyze current and emerging trends & technologies to support quality health care.
- Construct effective communication strategies for working effectively in teams and collaboratively with other health care providers.
- Analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state and national level based on understanding of health policy and principles of advocacy.
- Design evidence-based and culturally relevant clinical prevention interventions.
- Conduct a comprehensive and systematic physical assessment as a basis for decision-making.

- Advance nursing practice through education, informatics, or leadership utilizing didactic and experiential learning.

Curriculum

Core Courses

18 credits

NUR501	Scientific Underpinnings for Practice	3 credits
	This course examines principles and processes of evidence based practice as a strategy to guide clinical decision making, initiate practice change and improve nursing practice, including translating, evaluating and disseminating the evidence. Course elements include gaining knowledge of research design, statistical concepts and search strategies.	
NUR503	Informatics Foundation and Health Care Technology	3 credits
	This course will assist students within the graduate program to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.	
NUR504	Introduction to Organizational Leadership in Nursing	3 credits
	Emphasizing leadership decision making, this course includes an overview of theories, research, and applications that focus on managing organizational behavior, quality improvement, and systems leadership across health care delivery systems. Students will learn how patient care systems are structured, processes developed, and outcomes affected by actions of leaders and employees.	
NUR505	Health Assessment and Promotion Across the Lifespan	3 credits
	This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. The role of gender, genetics, and cultural influences in the context of health assessment and promotion will also be analyzed.	
NUR506	Professional Role: Communication & Collaboration for Improving Pt. Outcome	3 credits
	This course will assist nurses to develop, analyze and apply skills in collaboration and communication, including the Interprofessional Education Collaborative's core competencies, effective communication strategies based on complexity and transformational leadership theory, skills of presentation and publication to improve patient care and advance nursing practice.	

NUR507	Health Policy & Advocacy	3 credits
<p>In this course students analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state, and federal levels. Concepts such as politics, policy, market forces, and advocacy are used to assess how system approaches can affect health care delivery.</p>		

Nursing LeadershipTrack

15 credits

NUR630	Health Care Economics and Financial Management	3 credits
<p>The Health Care Economics and Financial Management course focuses on examination and understanding of health care financing and reimbursement concepts preparing a world ready nurse leader to function in a variety of health care delivery settings. Content focuses on concepts of budget and leadership management, influencing policy makers, and linking patient care outcomes to resource management.</p>		

NUR640	Leadership for Change	3 credits
<p>This course focuses on the needs of health care leaders to take health care delivery into the future through creative, innovative design initiatives focusing on a consumer driven health care delivery system. Content includes: variables impacting health care delivery systems, reimbursement and funding for design change, managing competition, and managing human and financial resources.</p>		

NUR650	Leadership and Health Care Operations	3 credits
<p>This course provides an overview of three distinct and necessary areas of leadership knowledge with an emphasis on managerial decision-making including legal aspects of health care, human resource management, and health policy. Students will work through specific scenarios in each of these areas to identify legal, ethical, and political issues.</p>		

NUR660 - Health Care Leadership Practicum (3)

NUR670 - Healthcare Leadership Capstone (3)

Nursing Informatics Track

15 credits

NUR631	Integrating Technology into a Health Care Environment	3 credits
<p>This course will assist healthcare professionals within a graduate program to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various health settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>		

Pre-requisites Complete the following course:

- NUR503 Informatics Foundation and Health Care Technology

NUR651	Database Management for Evidence-based Decision making	3 credits
<p>This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>		
NUR661	Health Care Informatics Practicum	3 credits
<p>During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.</p>		
NUR671	Healthcare Informatics Capstone	3 credits
<p>During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.</p>		
HCI583	Virtual Engagement to Improve Health	3 credits
<p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>		

Nursing Education Track

15 credits

NUR632	Curriculum Design and Evaluation in Nursing Education	3 credits
<p>This course focuses on the processes of curriculum development and evaluation that are critical responsibilities of nurse educators in schools of nursing, patient education programs, or staff development. Course goals include how the curriculum provides guidelines for program delivery and methods for evaluating program effectiveness.</p>		
NUR642	Professional Role and Responsibility of the Nurse Educator	3 credits
<p>The professional role and responsibility of the nurse educator course focuses on diverse roles and practice environments experienced by nurse educators. The course will provide novice and experienced nurse educators with guidelines for practice in classroom, clinical, staff development, and various educational settings. Academic and institutional policies, protocols and legal aspects will be explored.</p>		

NUR652	Teaching Strategies and Information Technology for the Nurse Educator	3 credits
	This course will focus on strategies to develop knowledge and skill sets in pedagogy, teaching-learning theories, testing and measurement, and various educational technologies. An in-depth introduction to information technology that supports practice and improves patient care and outcomes will be explored.	
NUR662	Healthcare Education Practicum	3 credits
	During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.	
NUR672	Healthcare Education Capstone	3 credits
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	

Practice Experience Requirements

The culminating learning experience of the MSN program includes a practicum course (3 credits, including a minimum of 60 required practice experience hours) and capstone course (3 credits, including a minimum of 60 required practice experience hours). The student will complete a project at the identified agency that is related to the enrolled specialty track. A signed affiliation agreement with the agency and an approved preceptor must be in place prior to engaging in practice experiences. It is the responsibility of the student to comply with agency requirements.

For those MSN students wanting to pursue a DNP degree from Chatham University, they may choose to take NUR 697. This course is designed for those planning admission to Chatham University's DNP program and lack the total required practice experience hours. There is a 1, 2, and 3 credit version of this course is available.

Transfer Credits

Transfer Credits: Students may transfer up to 6 credit hours of graduate level nursing courses into the program. All requests for transfer credits must be made in writing prior to enrollment. The nursing program's Admissions and Progression Committee will review and determine if courses taken through another higher education institution can fulfill the requirements of any courses required for the MSN program. If transfer courses are accepted, a revised schedule planner will be developed and sent to the student outlining the courses still necessary to complete at Chatham University for degree completion.

RN-to-MSN Educator Track

[RN-to-MSN Educator Track](#)

2022-2023 Course Catalog

Master of Sustainability (MSUS)

The MSUS degree is comprised of 42 credits:

Foundation courses (12 credits) allow students to explore the nature of system analysis and sustainability as it relates to the ecological, economic, social and and business world.

Skills for work and research courses* (18 credits) provide research, communication and work related skills.

Track Electives (12 credits) allow students to explore in depth a particular area of sustainability study.

Please note:

- Students may take more electives
- Students are not limited to electives listed in SUS
- Up to six hours of internship credit may count towards the area of specialization

*Students have the option to complete a 70-140-hour placement in a professional or research setting. Ideally, this will be done for 5-10 hours/week over a 14-week period during the summer following the first year of the program although a fall or spring semester internship is permissible. A hybrid experience is also possible.

Admission Requirements

- Curriculum vita or resume, please feel free to include volunteer activities

Learning Outcomes

Know Sustainability Broadly and Deeply

Students will develop broad foundational knowledge with deep topical knowledge in one area of sustainability

Solve Practical Sustainability Problems

Students will learn professional tools and practical and creative problem-solving skills to implement sustainability solutions

Communicate Sustainability Clearly

Students will learn to effectively communicate sustainability problems, solutions and opportunities to a broad base of stakeholders

Lead and Follow on Sustainability

Students will gain the ability for transformative leadership, teamwork, and collaboration on sustainability problems and opportunities

Understand Sustainability to Achieve well-being

Students will acquire a holistic understanding of complex systems for the purpose of achieving individual, environmental, community, and economic well-being in one or more UN Sustainable Development Goals.

Curriculum

Foundation Courses

21 credits

SUS502	Sustainability and Systems In this course, students will develop skills necessary to understand, describe, and communicate complex systems. Working from examples, exercise and interactive discussions, students will learn to identify key drivers and leverage points for change. Students will learn to solicit useful information, model, and enact change using a various systems-based tools.	3 credits
SUS504	Foundations of Sustainability This course provides students the skills to understand, communicate, and critique the fundamentals of sustainability at multiple scales and across disciplines and cultures. It explores sustainability's origins and foundations, application, and assessment. We evaluate the inter-relationships among environmental, societal, and economic well-being and the implications on individual and social decision-making.	3 credits
SUS512A	Sustainability in Pittsburgh Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". Students will engage in 7 weekly workshops and guest lectures with introducing them to the city's history, key sustainability initiatives and job prospects. Students will provide 7 weekly blogs, one for each visit.	1 credits
SUS512B	Sustainability in Pittsburgh Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". Students will engage in 10 weekly field trips with participant observation giving a glimpse of the socio-ecological history of the city. Students will provide 10 blogs, one for each visit, and a final paper.	2 credits

SUS510	Pursuing Sustainability through Governance	3 credits
	Overcoming sustainability challenges requires influencing human behavior. In this course, we explore ways in which policy can shape behavior and draw insights from fields like political science, psychology, economics, the philosophy of justice, and science and technology studies to enhance our ability to understand, cultivate, and realize sustainability goals.	
SUS601	Applied Ecology	3 credits
	The overall goal of this course is to examine the role that ecological science contributes to sustainability. Students will critically assess, process evidence, and enhance communication skills for scientific methods. All topics and applications considered will be centered on issues of sustainability in the ecological sciences, such as climate change, water pollution, land use change, and the loss of biodiversity.	
SUS603	Sustainability: Ethics, Equity, Justice	3 credits
	This course focuses on the role of the "social" as one of the three pillars of sustainability. It explores historic and contemporary notions of ethics, social equity and social justice. It examines how these concepts can be applied to sustainability by studying local and global case studies.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • SUS504 Introduction to Sustainability and Systems • SUS501 Fundamentals of Sustainability • SUS503 Understanding Knowledge Across the Disciplines 	
SUS605	Leadership for Transitions to Sustainability	3 credits
	This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.	

Skills for Work and Research Courses

7 credits

SUS621	The Craft of Research	1 credits
	This class introduces students to evidence-based research in sustainability guiding them through the challenges. Topics include the role and limits of research, the skill of connecting with your readership, developing well-defined and appropriately scaled research questions/problems, identifying and assessing source material and methodologies, and constructing well-supported arguments and evidence.	

SUS691	Internship Internship	1 credits
SUS698A	Final Project Course provides supervision and research guidance for the final project. Students will complete a final project independently or as part of a group to complete the MSUS degree requirements. The form of the final project is flexible and should be linked to the student's self-defined sustainability challenge. Part one of two.	1 credits
COM515	Environmental Communications Course offers an overview of environmental communications providing an analysis of how individuals, institutions and corporations describe and portray our interactions with the environment. Discussion topics include environmental discourse, environmental conflicts, risk communication, environmental disasters, environmental social movements, and the nature-society relationship.	3 credits

Electives: Urban & Energy Systems

Total of 13 credits of electives

SUS514	Building Sustainable and Resilient Cities Today's cities can thrive by becoming more sustainable, walkable, climate-resilient and restoring urban ecosystems. Cities also face a shrinking middle class and communities that are disproportionately affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.	3 credits
SUS517	Climate Change and Sustainability Climate change is one of today's most critical issues. We will study the science of climate change impacts and examine frameworks used by the global community to develop climate projections, build resiliency, and mitigate emissions. Through team projects we investigate topics in climate resiliency or emissions reduction in more depth.	3 credits
SUS520	Community Energy Systems This class examines community energy systems using the examples of Eden Hall, national and international case studies, and a class project. Technical applications include estimating energy production, heating and cooling, and building energy efficiency. We discuss energy access and energy justice, relevant state policy, and organizing and financing community energy.	3 credits

SUS591	Independent Study	1 credits
	Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • XXX123 Permission of Instructor 	
SUS592	Independent Study	2 credits
	Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • XXX123 Permission of Instructor 	
SUS593	Independent Study	3 credits
	Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.	
	Pre-requisites Complete the following course:	
	<ul style="list-style-type: none"> • XXX123 Permission of Instructor 	
SUS617	Pathways to a Renewable Future	3 credits
	This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.	
SUS619	The Water's Edge: Science and Policy from Summit to Sea	3 credits
	The water's edge is rich with ecological and cultural activity. Through online discussions, field excursions, public service, participation in research, interactions with practitioners, and a curated exhibit, this course bridges theory with application for the science and policy relevant to the aquatic-terrestrial interface (e.g., streams, rivers, lakes, and coastal shorelines).	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • SUS501 Fundamentals of Sustainability • SUS502 Sustainability and Systems 	
SUS625	Restorative Environmental Justice	3 credits
	This course analyzes the environmental justice movement around the world. It draws lessons from the conditions that have led to environmental injustices, the historical development of the movement, the policy responses of governments and international agencies, the solutions pursued by communities, and the role played by the private sector. The course explores the role of natural asset-building strategies that simultaneously reduce poverty and address environmental issues.	

SUS640	Sustainable Community Development	3 credits
<p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access • SUS504 Foundations of Sustainability 		
SUS683	Special Topics	3 credits
<p>This course is designed to allow students to explore in depth a specific topic or area of sustainability.</p>		
BUS577	Information Systems and Analytics	3 credits
<p>This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.</p>		

Electives: Ecology & Resource Management

Total of 13 credits of electives

SUS508	Environmental Statistics	3 credits
<p>Students in this course will become proficient in executing quantitative methods pertinent sustainability science, including multiple linear regression, descriptive multivariate statistics, and time series analyses. All assignments aim to generate experience with applied problem-solving and will require scripting in program R to maximize analytical and data management efficiency. This course requires a foundation in statistical methods.</p>		
SUS514	Building Sustainable and Resilient Cities	3 credits
<p>Today's cities can thrive by becoming more sustainable, walkable, climate-resilient and restoring urban ecosystems. Cities also face a shrinking middle class and communities that are disproportionately affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.</p>		

SUS517	<p>Climate Change and Sustainability</p> <p>Climate change is one of today's most critical issues. We will study the science of climate change impacts and examine frameworks used by the global community to develop climate projections, build resiliency, and mitigate emissions. Through team projects we investigate topics in climate resiliency or emissions reduction in more depth.</p>	3 credits
SUS521	<p>Ecotoxicology and Environmental Health</p> <p>Human health is intimately connected to environmental conditions and ecosystem integrity. Introducing concepts and measures of ecosystem and human health, this course will cover the principles and practice of contributing fields including ecotoxicology, epidemiology, environmental health and risk assessment. Students will be led from inquiry to action for key issues.</p>	3 credits
SUS526	<p>Sustainable Aquaculture</p> <p>This course examines the historical development and cultural importance of aquaculture, as well as practical considerations for managing modern aquaculture systems. Emphasis will lie on low impact aquaculture systems and approaches, which minimize adverse environmental impacts, and encourage socially responsible development that enhances both the natural resource base and community livelihoods.</p>	3 credits
SUS591	<p>Independent Study</p> <p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	1 credits
SUS592	<p>Independent Study</p> <p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	2 credits
SUS593	<p>Independent Study</p> <p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	3 credits

SUS601	Applied Ecology	3 credits
	The overall goal of this course is to examine the role that ecological science contributes to sustainability. Students will critically assess, process evidence, and enhance communication skills for scientific methods. All topics and applications considered will be centered on issues of sustainability in the ecological sciences, such as climate change, water pollution, land use change, and the loss of biodiversity.	
SUS617	Pathways to a Renewable Future	3 credits
	This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.	
SUS625	Restorative Environmental Justice	3 credits
	This course analyzes the environmental justice movement around the world. It draws lessons from the conditions that have led to environmental injustices, the historical development of the movement, the policy responses of governments and international agencies, the solutions pursued by communities, and the role played by the private sector. The course explores the role of natural asset-building strategies that simultaneously reduce poverty and address environmental issues.	
FST520	Basic Agroecology	3 credits
	Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.	
FST520L	Growing Sustainably Lab	1 credits
	This course is a co-requisite to FST520, Growing Sustainably, and comprises the experiential lab component of the course. Students will engage in sustained research on sustainable agricultural projects, from biodynamic methods to soil or pest management comparatives. Course may be taken up to four times for credit.	
FST613	Community Research: Food and Health	1 credits
	Research focused on community needs, health and wellness issues, and the relationship between food access, agriculture, and food production. Participation in a pre-selected research study that aims to address some component of health, food access, agriculture, and cooking. May include: engaging relevant community agencies; recruitment of subjects; screening subjects for risk; adhering to IRB regulations; data collection and data entry, aiding in teaching a risk reduction class, participating in the urban garden, and coordinating cooking demonstrations.	

FST625	U.S. Agricultural Policy	3 credits
<p>This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems 		

Electives: Business & Innovation

Total of 13 credits of electives

SUS516	Sustainable Decision Analysis	3 credits
<p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>		

SUS591	Independent Study	1 credits
<p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 		

SUS592	Independent Study	2 credits
<p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 		

SUS593	Independent Study	3 credits
<p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 Permission of Instructor 		

SUS607	Applied Green and Social Innovation	3 credits
	The class helps students develop skills for managing innovation focusing on Food, Agriculture, Environmental and Social Product and Service innovations. Students will work with actual ideas and or start-ups from local incubators and entrepreneurs. The class focuses on helping students to develop skills to use innovations for solving major social and environmental problems.	
SUS617	Pathways to a Renewable Future	3 credits
	This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.	
SUS683	Special Topics	3 credits
	This course is designed to allow students to explore in depth a specific topic or area of sustainability.	
FST518	Business of Food and Agriculture	3 credits
	In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.	
	Pre-requisites Complete any 1 of the following courses:	
	<ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems Complete any 1 of the following courses: <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	
BUS552	Managing Non-Profit Organizations	3 credits
	Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.	
BUS562	Global Procurement	3 credits
	In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.	

BUS570	Global Business	3 credits
<p>This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.</p>		
BUS575	Leading Organizations and Projects	3 credits
<p>The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.</p>		
BUS577	Information Systems and Analytics	3 credits
<p>This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.</p>		
BUS582	Foundations of Project Management	3 credits
<p>This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.</p>		
BUS639	Sustainability and Assessment Reporting	3 credits
<p>An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.</p>		

Electives: Food Systems

Total of 13 credits of electives

SUS514	Building Sustainable and Resilient Cities	3 credits
<p>Today's cities can thrive by becoming more sustainable, walkable, climate-resilient and restoring urban ecosystems. Cities also face a shrinking middle class and communities that are disproportionately affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.</p>		

SUS517	Climate Change and Sustainability Climate change is one of today's most critical issues. We will study the science of climate change impacts and examine frameworks used by the global community to develop climate projections, build resiliency, and mitigate emissions. Through team projects we investigate topics in climate resiliency or emissions reduction in more depth.	3 credits
SUS526	Sustainable Aquaculture This course examines the historical development and cultural importance of aquaculture, as well as practical considerations for managing modern aquaculture systems. Emphasis will lie on low impact aquaculture systems and approaches, which minimize adverse environmental impacts, and encourage socially responsible development that enhances both the natural resource base and community livelihoods.	3 credits
SUS591	Independent Study Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	1 credits
SUS592	Independent Study Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	2 credits
SUS593	Independent Study Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest. Pre-requisites Complete the following course: <ul style="list-style-type: none"> • XXX123 Permission of Instructor 	3 credits
SUS617	Pathways to a Renewable Future This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.	3 credits

SUS625	Restorative Environmental Justice	3 credits
	<p>This course analyzes the environmental justice movement around the world. It draws lessons from the conditions that have led to environmental injustices, the historical development of the movement, the policy responses of governments and international agencies, the solutions pursued by communities, and the role played by the private sector. The course explores the role of natural asset-building strategies that simultaneously reduce poverty and address environmental issues.</p>	
SUS640	Sustainable Community Development	3 credits
	<p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access • SUS504 Foundations of Sustainability 	
FST512	Practical Nutrition	3 credits
	<p>Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.</p>	
FST518	Business of Food and Agriculture	3 credits
	<p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a breakeven point, and budget formulation.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	
FST520	Basic Agroecology	3 credits
	<p>Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	

FST520L	<p>Growing Sustainably Lab</p> <p>This course is a co-requisite to FST520, Growing Sustainably, and comprises the experiential lab component of the course. Students will engage in sustained research on sustainable agricultural projects, from biodynamic methods to soil or pest management comparatives. Course may be taken up to four times for credit.</p>	1 credits
FST522	<p>GIS: Food and Agriculture</p> <p>This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.</p>	3 credits
FST603	<p>Food Journeys</p> <p>From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.</p> <p>Pre-requisites Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST509 Food Access 	3 credits
FST607	<p>Sustainable Consumption</p> <p>Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems <p>Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST509 Food Access • FST509 Food Access 	3 credits
FST613	<p>Community Research: Food and Health</p> <p>Research focused on community needs, health and wellness issues, and the relationship between food access, agriculture, and food production. Participation in a pre-selected research study that aims to address some component of health, food access, agriculture, and cooking. May include: engaging relevant community agencies; recruitment of subjects; screening subjects for risk; adhering to IRB regulations; data collection and data entry, aiding in teaching a risk reduction class, participating in the urban garden, and coordinating cooking demonstrations.</p>	1 credits

FST625	U.S. Agricultural Policy	3 credits
<p>This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • FST508 Food Systems • FST508 Food Systems 		

BUS582	Foundations of Project Management	3 credits
<p>This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.</p>		

Electives: Policy & Regulation

Total of 13 credits of electives

SUS514	Building Sustainable and Resilient Cities	3 credits
<p>Today's cities can thrive by becoming more sustainable, walkable, climate-resilient and restoring urban ecosystems. Cities also face a shrinking middle class and communities that are disproportionately affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.</p>		

SUS517	Climate Change and Sustainability	3 credits
<p>Climate change is one of today's most critical issues. We will study the science of climate change impacts and examine frameworks used by the global community to develop climate projections, build resiliency, and mitigate emissions. Through team projects we investigate topics in climate resiliency or emissions reduction in more depth.</p>		

SUS562	Economics of the Environment	3 credits
<p>This course is designed to introduce you to how economists think about the environment. The theory of externalities and market failure provide the basis for applying microeconomic concepts to the study of environmental issues. Analytical tools, particularly cost-benefit analysis, are explained and applied to problems with environmental dimensions.</p>		

SUS591	Independent Study	1 credits
<p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-requisites Complete the following course:</p>		

- XXX123 Permission of Instructor

SUS592	Independent Study Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest. Pre-requisites Complete the following course: • XXX123 Permission of Instructor	2 credits
SUS593	Independent Study Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest. Pre-requisites Complete the following course: • XXX123 Permission of Instructor	3 credits
SUS625	Restorative Environmental Justice This course analyzes the environmental justice movement around the world. It draws lessons from the conditions that have led to environmental injustices, the historical development of the movement, the policy responses of governments and international agencies, the solutions pursued by communities, and the role played by the private sector. The course explores the role of natural asset-building strategies that simultaneously reduce poverty and address environmental issues.	3 credits
SUS640	Sustainable Community Development This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects. Pre-requisites Complete any 1 of the following courses: • FST508 Food Systems • FST509 Food Access • SUS504 Foundations of Sustainability	3 credits
SUS683	Special Topics This course is designed to allow students to explore in depth a specific topic or area of sustainability.	3 credits
FST613	Community Research: Food and Health Research focused on community needs, health and wellness issues, and the relationship between food access, agriculture, and food production. Participation in a pre-selected research study that aims to address some component of health, food access, agriculture, and cooking. May include: engaging relevant community agencies; recruitment of subjects; screening subjects for risk; adhering to IRB regulations; data collection and data entry,	1 credits

aiding in teaching a risk reduction class, participating in the urban garden, and coordinating cooking demonstrations.

BUS582 Foundations of Project Management

3 credits

This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.

BUS639 Sustainability and Assessment Reporting

3 credits

An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.

Post-Professional Doctorate of Occupational Therapy

The Professional Doctorate of Occupational Therapy (OTD) program is designed for occupational therapy clinicians and/or academicians who want to enhance their careers and be professional leaders. Students learn to apply evidence-based literature and bring practice to a heightened level of professional accountability, develop into a professional leader in areas of public policy, professional advocacy, and business management, gain additional theoretical knowledge and clinical competence, and practice concepts of educational theory and measurement as it relates to both clients and students. Each course is intricately connected to the professional student's practice focus. Student growth is not simply academic; what is learned in "the classroom" can be applied directly to the student's work setting. The student will grow into an advanced clinician. The professional student's practice focus may be the setting in which they work, or may extend into the community or an emerging practice area.

Program Structure:

The online OTD program consists of ten (10) courses that are intricately connected to the professional student's practice focus.

Admission Requirements

OTD FAST-TRACK PROGRAM

The OTD Fast-track program is available to certain students who complete their MOT at Chatham University. Students in the OTD Fast-track program are required to take 27 credits, compared with the normal 30 for the OTD program. Fast-track students are not required to take OTD742, since they have already completed OTH601 at Chatham.

Learning Outcomes

Learning Outcomes

Upon completion of the OTD Program, graduates will have developed knowledge and skills to become evidence-based practitioners, advanced clinicians, and professional leaders. Specifically, graduates will:

1. Become self directed, evidence-based learners through the ability to access and critically evaluate the reliability of electronic databases and web resources.
2. Demonstrate the ability to access and critically evaluate literature related to occupational therapy.
3. Apply principles of evidence-based practice as a basis for clinical decision making in the student's work setting.
4. Demonstrate advanced knowledge of occupational therapy practice through the study and application of occupational science literature and occupation-based intervention.

5. Design, implement, and evaluate the effectiveness of innovative occupation-based programs in the student's chosen area of interest.
6. Develop the skills to become professional leaders in areas of public policy/ethics, professional advocacy, education, and business.

Curriculum

Degree Requirements

30 credits

OTD740	Occupational Science Professional students examine landmark occupational science literature and apply learned concepts of human nature and meaningful occupation to observation exercises within their practice focus.	3 credits
OTD741	Evidence-Based Practice This course is designed to provide the experienced therapist with a systematic method to critically evaluate and integrate the results of current scientific literature into the clinical decision making process. Students will participate in discussions and practical exercises to articulate clinical questions that can be answered through sources of scientific evidence. Strategies for searching relevant data bases, appraising and evaluating sources of evidence will be presented.	3 credits
OTD742	Advanced Practice Concepts and Skills Students apply The Occupational Therapy Practice Framework: Domain and Process (AJOT, 2014) and conceptual models most relevant for their practice focus to evaluation and intervention processes. Additionally, students redesign facility forms to reflect The OT Practice Framework's language and concepts.	3 credits
OTD750	Occupational Therapist as Entrepreneur This course provides the professional student with the knowledge and skills necessary to market and manage an occupational therapy practice in either traditional or emerging healthcare systems. Students develop business plans and marketing strategies and research potential financing through grants or loans. Legal and ethical issues impacting practice are also examined.	3 credits
OTD751	Capstone Project Design Students continue to develop their ability to critically evaluate scientific evidence within their practice focus. Through a critical review of the literature, the professional student generates an evidence-based plan of assessment or intervention. This is linked to the Capstone Rotation (faculty approval).	3 credits

OTD752	Education Theory and Technology	3 credits
<p>This course, through an examination of learning theories, provides the therapist with strategies to develop optimal learning experiences for their students, clients, caregivers, or employers. Coursework is applied directly in the professional student's educational and/or clinical setting. Students gain skills in current technological tools used in the teaching-learning environment.</p>		
OTD760	Leadership and Professionalism	3 credits
<p>This course examines the meaning of leadership from both a personal and organizational perspective. Students explore leadership theories and styles and the meaning of professionalism through narratives of leaders and related literature. Through group discussion of leadership and professional issues, students reflect and on their own leadership strengths, as well as strategies for applying this knowledge in their professional lives.</p>		
OTD761	Proposal Development	1 credits
<p>This course provides the experienced therapist with the skills and resources necessary for developing competitive proposals, including an IRB proposal, a proposal for a professional presentation, and a proposal for a professional publication. Students will explore and evaluate presentation and publication opportunities, participate in discussions to understand human subject protection, and refine their preliminary IRB proposal, created in OTD 751, to gain approval for their capstone project.</p>		
<p>Pre-requisites Complete all 2 of the following courses:</p>		
<ul style="list-style-type: none"> • OTD741 Evidence-Based Practice • OTD751 Capstone Project Design 		
OTD766	Methods of Evaluation	3 credits
<p>Students learn to evaluate the effectiveness of their teaching and therapeutic interventions. Methods for survey and test construction are examined and practiced with consumers of our services: students, clients, and/or caregivers.</p>		
OTD772	Capstone Implementation and Evaluation	5 credits
<p>The methods of evidence-based practice culminate in the professional student's design and implementation of an intervention within their clinical setting. Although an independent study, students network with faculty mentors, administrators, and other professionals to successfully engage in the evidence-based occupational therapy capstone project. Professional students apply concepts from previous courses as they evaluate the efficacy of their individual implemented programs and present their findings. Presentations are conducted on the Chatham University campus to the Master of occupational therapy Program's faculty, students, and area practitioners.</p>		
<p>Pre-requisites Complete all 3 of the following courses:</p>		
<ul style="list-style-type: none"> • OTD741 Evidence-Based Practice • OTD751 Capstone Project Design • OTD761 Proposal Development 		

Bridge Program

This program is designed for experienced Occupational Therapists who hold a Bachelor's degree in Occupational Therapy but may also be recommended for candidates who have a Master's degree in another field. These students will be admitted to the Bridge to Post-Professional OTD program. Before entering the 16-month cohort, students will complete the following courses. All courses may be completed online at Chatham University:

OTH690	Introduction to Evidence-Based Practice for Occupational Therapists	3 credits
	Students acquire evidence based practice literature skills by learning to search data bases for peer reviewed occupational therapy literature and appraising the evidence in terms of a focused research question. Students acquire knowledge of principles needed to critically read peer reviewed evidence through instructor demonstration of evidence appraisal, online group discussions/critiques of research articles, and writing assignments that require the student to summarize and paraphrase salient information in professional language.	
<hr/>		
OTH695	Models of Practice in Occupational Therapy	3 credits
	This course presents occupation based models that guide the practice of occupational therapy. Students will analyze and compare selected models via assigned readings and group discussions. Students will become familiar with elements and characteristics, assessment tools and techniques, treatment planning and intervention strategies, and documentation formats associated with the models presented, and apply selected models to their professional practice.	
<hr/>		
ENG528	Academic Writing	3 credits
	Students develop the writing skills necessary for success in graduate school, including proper citations, time management, and the content and format for two types of research proposals. Students become proficient in the APA style and have the opportunity to resolve grammar and structure problems with the professor.	

Contact

Jennifer Lape
PPOTD Program Coordinator
jlape@chatham.edu
412-365-1559

2022-2023 Course Catalog

RN to MSN (RN-MSN)

The RN to MSN Integrated Degree Educator Track allows the student to complete two graduate degrees in 47 credits. The BSN component prepares the registered nurse to improve leadership and management skills in the role of the clinical nurse. The MSN educator track provides the student with the graduate level knowledge and skills to become leaders and educators to nurses and other healthcare professionals as well as patients in clinical, academic, medical device sales, pharmaceutical sales, continuing education, and healthcare insurance settings. A total of 120 practice experience hours will be completed.

Admission Requirements

1. Completed free online application: apply.chatham.edu
2. Copy of official transcripts of all completed college level coursework from all schools attended with proof of completion of an RN degree (associate or diploma) with a minimum 3.0 GPA
3. Proof of active, unencumbered RN license in your state
4. Current résumé/curriculum vitae
5. Admissions essay (to be mailed or e-mailed as a Word document to GradAdmission@chatham.edu):
 - Describe the evolving role of the MSN prepared nurse in the practice setting.

Admissions Materials may be submitted to:

Chatham University
Berry Hall/SCPS Admission
Woodland Road
Pittsburgh, PA 15232
Fax: (412) 365-1609
Email: GradAdmission@chatham.edu

Learning Outcomes

BSN Program Outcomes

1. Synthesize knowledge from nursing and other related disciplines in acquisition and application of nursing knowledge, competencies, and values for professional practice.
2. Demonstrate knowledge for nursing leadership, quality improvement, and patient safety in order to provide high quality care.
3. Integrate evidence-based findings into professional nursing practice.
4. Apply skills related to information management and patient care technology in order to deliver quality patient care.
5. Comprehend the influence of healthcare policies and finance on healthcare system operations.
6. Utilize interprofessional collaboration and communication with other health team members in

- planning, coordinating, providing, and evaluating care.
7. Apply concepts of clinical prevention and health promotion to individuals, families, and communities in a global society.
 8. Provide professional, culturally competent, and ethically congruent care that reflects dignity and uniqueness of individuals and groups in diverse global populations.
 9. Utilize the nursing process and health care resources in the protection, promotion, and optimization of health in care of individuals, families, and communities across the lifespan.

MSN Program Outcomes

1. Integrate scientific findings from nursing and other fields for continual improvement of nursing care.
2. Synthesize organizational and systems leadership principles to promote high quality and safe patient care.
3. Implement methods and tools of QI principles to promote high quality and safe patient care.
4. Critique EB literature with a basic understanding of quantitative and qualitative research to guide decision-making.
5. Analyze current and emerging trends and technologies to support quality health care.
6. Analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state and national level based on understanding of health policy and principles of advocacy.
7. Construct effective communication strategies for working effectively in teams and collaboratively with other health care providers.
8. Design evidence-based and culturally relevant clinical prevention interventions.
9. Conduct a comprehensive and systematic assessment as a basis for decision-making.
10. Obtain expertise in the role of educator, informatics and leadership.

Curriculum

Major Requirements

47 credits including

RN-BSN Program (each course = 3 credits unless indicated)

IND175	Introduction to Nursing Resources This course will teach nursing students how to develop and apply skills in locating, evaluating, and synthesizing information from a variety of library and information resources. The work completed in this course will help nursing students become more efficient in areas of evidence-based practice.	1 credits
NUR402	Health Policy and Finance for Nurses This course is designed to explore the role of Health and Public Policy, financial considerations, formulation and role of legislation and regulation, and ethical principles related to ANA Code of Ethics. Also addressed are topics including value-based purchasing, end-of-life care, living wills, advanced directives, social networking and	3 credits

Substitute:

NUR507	Health Policy & Advocacy	3 credits
<p>In this course students analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state, and federal levels. Concepts such as politics, policy, market forces, and advocacy are used to assess how system approaches can affect health care delivery.</p>		

NUR403W	Women's Health Nursing	3 credits
<p>This course will present an overview of issues relevant to women's health nursing. Nursing assessment techniques specific to female clients will be explored. Specific nursing interventions to promote women's health will be covered including: HIV, early detection of female cancers, reproductive health, mental health issues, osteoporosis, pharmacokinetics, nutrition, physical fitness.</p>		

Substitute:

NUR505	Health Assessment and Promotion Across the Lifespan	3 credits
<p>This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. The role of gender, genetics, and cultural influences in the context of health assessment and promotion will also be analyzed.</p>		

NUR407	Scholarship for Evidence-Based Practice	3 credits
<p>This course will enable students to critically review nursing research, choose a relevant clinical issue to examine, explore literature, and utilize nursing research in clinical practice. Ethical principles of nursing research, particularly protection of human subjects and other ethical accountabilities focusing on research utilization and evidence-based practice will be explored.</p>		

Substitute:

NUR501	Scientific Underpinnings for Practice	3 credits
<p>This course examines principles and processes of evidence based practice as a strategy to guide clinical decision making, initiate practice change and improve nursing practice, including translating, evaluating and disseminating the evidence. Course elements include gaining knowledge of research design, statistical concepts and search strategies.</p>		

NUR409	Clinical Prevention, Population and Environmental Health This course provides a framework for the development of nursing interventions promoting population and environmental health for individuals and communities. Health promotion will be a significant focus of this course.	3 credits
NUR412	Nursing Communication and Quality Improvement This course will prepare the student for effective communication and collaboration amongst the interprofessional team with the goal of practicing high quality, safe, patient-centered care. Topics of quality improvement and interprofessional communication will be emphasized.	3 credits
Substitute:		
NUR506	Professional Role: Communication & Collaboration for Improving Pt. Outcome This course will assist nurses to develop, analyze and apply skills in collaboration and communication, including the Interprofessional Education Collaborative's core competencies, effective communication strategies based on complexity and transformational leadership theory, skills of presentation and publication to improve patient care and advance nursing practice.	3 credits
NUR410	Global Cultural Diversity and Specialty Population Nursing This course is focused on various cultural and specialty populations. Multiple aspects of culture, vulnerability, and needs of individual populations will be analyzed and discussed. Content includes issues of ethics, social justice, health literacy, and barriers to care.	3 credits
NUR411	Geriatric Nursing Multiple aspects of geriatric health and the aging population will be explored. Specific nursing interventions to promote older adult health will be covered including pharmacological considerations, nutrition, elder abuse, sexuality, coping with loss and grief, health and wellness promotion and the continuum of care.	3 credits
NUR499W	Nursing Leadership and Professional Practicum This culminating course, which fulfills Chatham's internship requirement, encompasses various aspects of professionalism and leadership that students will encounter and utilize at all levels of nursing. Students will apply leadership concepts and decision-making skills while they complete their capstone project.	4 credits

Subtotal BSN course credits: 14 credits

Note: If a student has not completed a total of 120 college-level credit hours after completing these core courses they will need to complete additional courses. Contact your academic advisor for further information or questions.

MSN Program (each course 3 credits)

NUR501	Scientific Underpinnings for Practice	3 credits
<p>This course examines principles and processes of evidence based practice as a strategy to guide clinical decision making, initiate practice change and improve nursing practice, including translating, evaluating and disseminating the evidence. Course elements include gaining knowledge of research design, statistical concepts and search strategies.</p>		

(count for both BSN and MSN)

NUR503	Informatics Foundation and Health Care Technology	3 credits
<p>This course will assist students within the graduate program to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>		

NUR504	Introduction to Organizational Leadership in Nursing	3 credits
<p>Emphasizing leadership decision making, this course includes an overview of theories, research, and applications that focus on managing organizational behavior, quality improvement, and systems leadership across health care delivery systems. Students will learn how patient care systems are structured, processes developed, and outcomes affected by actions of leaders and employees.</p>		

NUR505	Health Assessment and Promotion Across the Lifespan	3 credits
<p>This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. The role of gender, genetics, and cultural influences in the context of health assessment and promotion will also be analyzed.</p>		

(count for both BSN and MSN)

NUR506	Professional Role: Communication & Collaboration for Improving Pt. Outcome	3 credits
<p>This course will assist nurses to develop, analyze and apply skills in collaboration and communication, including the Interprofessional Education Collaborative's core competencies, effective communication strategies based on complexity and transformational leadership theory, skills of presentation and publication to improve patient care and advance nursing practice.</p>		

(count for both BSN and MSN)

NUR507	Health Policy & Advocacy	3 credits
	In this course students analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state, and federal levels. Concepts such as politics, policy, market forces, and advocacy are used to assess how system approaches can affect health care delivery.	
(count for both BSN and MSN)		
NUR632	Curriculum Design and Evaluation in Nursing Education	3 credits
	This course focuses on the processes of curriculum development and evaluation that are critical responsibilities of nurse educators in schools of nursing, patient education programs, or staff development. Course goals include how the curriculum provides guidelines for program delivery and methods for evaluating program effectiveness.	
NUR642	Professional Role and Responsibility of the Nurse Educator	3 credits
	The professional role and responsibility of the nurse educator course focuses on diverse roles and practice environments experienced by nurse educators. The course will provide novice and experienced nurse educators with guidelines for practice in classroom, clinical, staff development, and various educational settings. Academic and institutional policies, protocols and legal aspects will be explored.	
NUR652	Teaching Strategies and Information Technology for the Nurse Educator	3 credits
	This course will focus on strategies to develop knowledge and skill sets in pedagogy, teaching-learning theories, testing and measurement, and various educational technologies. An in-depth introduction to information technology that supports practice and improves patient care and outcomes will be explored.	
NUR662	Healthcare Education Practicum	3 credits
	During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.	
NUR672	Healthcare Education Capstone	3 credits
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	

Subtotal MSN additional courses to complete MSN degree: 33 credits

Total RN-BSN to MSN Dual Degree Program credits: 47 credits

Note: RN-BSN Program = 26 credits and MSN Nurse Educator Program = 33 credits
Taken separately = 59 credits

2022-2023 Course Catalog

Sustainability & Business Administration (MSUS/MBA)

The program gives students an understanding and skills from both sustainability and business. Through this program, students earn both the Master of Sustainability and the Master of Business Administration. It includes core courses in both business and sustainability, and courses that provide breadth and depth in sustainability, business, and sustainable business. The degree requires 57 credits, and is designed to be completed by full time students in two school years and one summer. An optional first summer is offered for students who require prerequisites or simply want more time to take classes.

Each student also engages in, a Business Consulting Capstone or (individual or group) Sustainability Final Project, and a summer-long professional placement. During the summer semester, students will engage in projects centering on real world challenges such as consultation with sustainable businesses, making business plans for sustainability businesses, or individual or group sustainability projects for businesses. Graduates will be uniquely prepared to champion sustainability in the business world.

Students meet all of the requirements for both the Master of Sustainability and the Master of Business Administration. Please refer to those programs for details.

Admission Requirements

Priority Deadline for Fall - **February 1** (all application materials must be received by this date for first consideration of fellowships/assistantships)

Regular Application Deadline for Fall: **July 1**

Regular Application Deadline for Spring: **November 1**

Admission to the Dual Degree MSUS-MBA program will be based on:

- Baccalaureate degree from an accredited college or university
- Overall undergraduate GPA of 3.0 or above on a 4.0 scale
- Proficiency in written and oral communications, college level math, and computer usage including word processing, spreadsheets, databases, and the Internet are required
- [Completed application form](#), including:
 - Official transcripts from all colleges and universities attended
 - Resume and/or additional information concerning professional or volunteer activities
 - Nonrefundable application fee of \$45 (unless application is [completed online](#))
- Two (2) letters of recommendation from faculty or direct work supervisors that describe the applicant's:
 - Capacity for independent thinking
 - Written and verbal communication skills
 - Ability to thrive in a collaborative, interdisciplinary academic setting
 - Commitment to a career advancing sustainability

- In approximately 500 words, please explain why you are interested in pursuing this degree. How will the degree impact your future personal and career goals?
- Students must complete pre-requisite courses in Financial Accounting, Business Statistics and Introduction to Microsoft Excel prior to beginning the program

Learning Outcomes

Sustainability

The goal of the Master of Sustainability is to provide professionally oriented students the skills, knowledge, experiences, and networks necessary to meet their career goals. To that end, we produce graduates recognized for their:

- intellectual and experiential core of knowledge about sustainability;
 - preparedness to champion and implement sustainability in a variety of settings;
 - entrepreneurial spirit and capacity for transformative leadership; and
 - commitment to ethical and informed citizenship
- To that end, our curriculum is designed to achieve a number of learning outcomes that include:

COMMUNICATION

Students will become effective communicators by evaluating and implementing appropriate communication strategies. They will develop written, oral, and visual tools and practices for communicating about sustainability to diverse audiences.

TEAMWORK AND TRANSFORMATIVE LEADERSHIP

Students will be prepared to take an active role in advancing sustainability, with the understanding that to do so will require behavioral, cultural, institutional, and other changes at multiple spatial and temporal scales.

CREATIVITY

Students will understand that facilitating sustainable attitudes and practices requires creativity in conceptualizing existing conditions and generating and implementing sustainable solutions to complex problems.

ETHICS

Students will understand ethical implications of decisions and actions across diverse cultural, political, and temporal perspectives and be prepared to choose and act with integrity in their careers.

CONCEPTUALIZING SUSTAINABILITY

Students will be able to explain the origins, meanings, and applications of sustainability, and by extension, explain the interrelationships among environmental, societal, and economic well-being. They will do this in a framework that recognizes the cultural dimensions of sustainability.

SYSTEMS THINKING

Students will develop tools to model complex systems, describe the impact of changes within systems, consider the impacts of decision-making on systems, and analyze a system's strengths and weaknesses.

TRANSDISCIPLINARITY AND COLLABORATION

Students will work across knowledge bases to better understand how different individuals and groups make decisions and work collaboratively with partners in the private sector, public sector, and academia. In these contexts, students will also learn how to apply the appropriate resources and methods to sustainability projects.

APPLICATION AND ASSESSMENT

Students will develop the necessary analytical skills for applying and assessing sustainability in a range of settings.

Business Administration

In master's level programs, knowledge of the key content areas of business is assumed. Students without previous business courses take the Foundation Courses. Graduates of master's level programs acquire a depth of knowledge in these areas that exceeds that of the typical bachelor's degree graduate. Graduates of the MBA program are able to demonstrate that they possess business-specific content outcomes and business-related professional skills outcomes.

Graduates of the MBA program will be able to:

- Recognize problems in business settings and propose solutions
- Use strategic analysis and integration
- Apply creativity and innovation in business practice
- Apply quantitative methods to real-world business situations
- Evaluate the impact on business of the global environment
- Identify and understand the ethical obligations and responsibilities of business
- Communicate effectively in written materials to relevant publics
- Communicate professionally in spoken words in one-on-one or business presentation situations
- Work with a team of colleagues on projects
- Demonstrate project management skills
- Demonstrate leadership skills through the ability to set direction and work with others
- Understand a specific area of business practice in depth
 - Information on Concentrations in the MSUS + MBA program can be found [here](#)

Curriculum

Major Requirements

Students must meet all of the admission requirements for both the MSUS and MBA programs, and complete any prerequisite associated with either program. A total of 57 credits are required to earn the dual degree:

SUS504	Foundations of Sustainability This course provides students the skills to understand, communicate, and critique the fundamentals of sustainability at multiple scales and across disciplines and cultures. It explores sustainability's origins and foundations, application, and assessment. We evaluate the inter-relationships among environmental, societal, and economic well-being and the implications on individual and social decision-making.	3 credits
SUS511	Project Design, Methods, and Evaluations	3 credits
BUS641	Sustainable Supply Chain Management This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.	3 credits
SUS580	Sustainable Behavior Change This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	3 credits
BUS570	Global Business This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.	3 credits

BUS577	Information Systems and Analytics This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.	3 credits

OR

SUS508	Environmental Statistics	3 credits
<p>Students in this course will become proficient in executing quantitative methods pertinent sustainability science, including multiple linear regression, descriptive multivariate statistics, and time series analyses. All assignments aim to generate experience with applied problem-solving and will require scriptwriting in program R to maximize analytical and data management efficiency. This course requires a foundation in statistical methods.</p>		

SUS516	Sustainable Decision Analysis	3 credits
<p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>		
SUS510	Pursuing Sustainability through Governance	3 credits
<p>Overcoming sustainability challenges requires influencing human behavior. In this course, we explore ways in which policy can shape behavior and draw insights from fields like political science, psychology, economics, the philosophy of justice, and science and technology studies to enhance our ability to understand, cultivate, and realize sustainability goals.</p>		
BUS671	Marketing Management	3 credits
<p>This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.</p>		
BUS698	Strategy and Entrepreneurship	3 credits
<p>"Develop strategies to gain and sustain competitive advantage. Examine the goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. Develop and implement strategy across industries, and as an entrepreneur, through case analyses and simulations. "</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • BUS671 Marketing Management 		
BUS672	Corporate Finance	3 credits
<p>This course deepens an understanding of financial analysis tools and concepts. Students will learn how and when to use the financial-analytical tools required to make effective business and policy decision. Functional areas addressed are assessing financial health, planning financial performance, interpretation of data and recommendations, supply-chain</p>		

management.

BUS576 Sustainable Human Capital 3 credits

Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.

SUS601 Applied Ecology 3 credits

The overall goal of this course is to examine the role that ecological science contributes to sustainability. Students will critically assess, process evidence, and enhance communication skills for scientific methods. All topics and applications considered will be centered on issues of sustainability in the ecological sciences, such as climate change, water pollution, land use change, and the loss of biodiversity.

BUS699 Business Consulting Capstone 3 credits

This course is the culminating experience in the MBA program. Students apply professional-level business consulting skills learned in the MBA program. Business Consulting Capstone student teams solve business problems for businesses and entrepreneurs.

Pre-requisites Complete all 2 of the following courses:

- BUS672 Corporate Finance
- BUS698 Strategy and Entrepreneurship

OR

SUS605 Leadership for Transitions to Sustainability 3 credits

This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.

SUS603 Sustainability: Ethics, Equity, Justice 3 credits

This course focuses on the role of the "social" as one of the three pillars of sustainability. It explores historic and contemporary notions of ethics, social equity and social justice. It examines how these concepts can be applied to sustainability by studying local and global case studies.

Pre-requisites Complete any 1 of the following courses:

- SUS504 Introduction to Sustainability and Systems
- SUS501 Fundamentals of Sustainability
- SUS503 Understanding Knowledge Across the Disciplines

SUS699 Advanced Seminar in Sustainability

3 credits

In this course students in the final semester of the Master of Sustainability program revisit materials from the first semester of the program in the context of their projects, areas of focus, and summer placements.

Pre-requisites Complete all 2 of the following courses:

- SUS601 Applied Ecology
- SUS602 The Political Economy of Sustainability

BUS652 Managerial Accounting

3 credits

This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.

Summer Immersion Experience

2022-2023 Course Catalog

Healthcare Analytics Certificate

12 credits

Admission Requirements

- Completed free online application
- A bachelor's degree with a minimum 3.0 GPA
- Official transcripts showing highest degree obtained

Admission materials may be submitted to:

Chatham University

Berry Hall

Woodland Road

Pittsburgh, PA 15232

Fax: (412) 365-1609

Email: GradAdmission@chatham.edu

Learning Outcomes

At the completion of the program, the student will be able to:

- Enhance analytic skills and techniques to influence decision making
- Utilize key business strategies that impact cost and quality of healthcare delivery
- Apply change management techniques to improve the healthcare delivery process
- Integrate project management concepts when changing current processes

Curriculum

Required:

HCI504 Project Management

3 credits

Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.

HCI651	Database Management for Evidence-Based Decision Making	3 credits
<p>This course will assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>		

Select one of the following:

HCI505	Foundational Data Analytics	3 credits
<p>This course explores data literacy, visual literacy and how outcomes are dependent upon the integrity of data, the analysis of data and the need for clearly defined report writing. Students will manipulate data for analysis and interpretation in order to effectively conduct and/or contribute to data analytics projects.</p>		

Pre-requisites Complete the following course:

- HCI651 Database Management for Evidence-Based Decision Making

HCA500	Data Literacy and Analytics	3 credits
<p>This course provides students the opportunity to master data literacy skills needed to participate in and contribute to a data-driven culture. Through analysis and appropriate visualization of data, students will effectively communicate data as information to influence decisions for targeted performance improvement areas. Students will engage in story telling using data.</p>		

HCA501	Analytics Leader	3 credits
<p>This course provides students the opportunity to strengthen basic skills and knowledge in using data to make decisions. Leadership skills addressing interprofessional communication, strategic thinking and persuasive motivation will be discussed. Students will engage in activities which advance their ability to use technology and information systems to influence outcomes and improve overall quality.</p>		

One Elective Course:

HCI502	Healthcare Delivery Systems	3 credits
<p>In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.</p>		

HCI503	Informatics Foundation and Health Care Technology	3 credits
	<p>This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>	
HCI506	Health Policy and Informatics	3 credits
	<p>This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.</p>	
HCI525	Advanced Analytics	3 credits
	<p>This course builds upon HCI505 by assisting students to advance their knowledge and skills regarding analytical methods. Using tableau, students will obtain a higher level of understanding in applying and manipulating advanced visual analytics while being introduced to machine learning with "R".</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • HCI505 Foundational Data Analytics 	
HCI631	Integrating Technology into a Healthcare Environment	3 credits
	<p>This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.</p>	
HCI583	Virtual Engagement to Improve Health	3 credits
	<p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>	
HCI584	Telehealth I	3 credits
	<p>This is a foundational course that introduces students to telehealth services. Core concepts to be explored include telecommunications, technology infrastructure, and basic business requirements of implementing a telehealth service. Students will be introduced to designing telehealth encounters that promote health and wellness for both clinicians and consumers.</p>	
HCI586	Cybersecurity	3 credits
	<p>Students will explore the cybersecurity needs within a health-related organization's IT infrastructure. Core concepts to be reviewed include cyber frameworks (exploitation, defense, threats etc.), cryptography, malware, and hacking. Students will gain a foundational awareness of the technical and managerial competencies needed to protect and secure database systems and information infrastructures.</p>	

2022-2023 Course Catalog

Healthcare Informatics Certificate

12 credits

Admission Requirements

- Completed free online application
- A bachelor's degree with a minimum 3.0 GPA
- Official transcripts showing highest degree obtained

Admission materials may be submitted to:

Chatham University

Berry Hall

Woodland Road

Pittsburgh, PA 15232

Fax: (412) 365-1609

Email: GradAdmission@chatham.edu

Learning Outcomes

At the completion of the program, the student will be able to:

- Strengthen communication and collaboration skills when integrating technology into a health related setting
- Improve the healthcare delivery processes involving technology through workflow analysis and change management
- Apply data management and analytic skills in decisions-making
- Integrate project management concepts when changing current processes

Curriculum

Required:

HCI504	Project Management	3 credits
<p>Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.</p>		
HCI631	Integrating Technology into a Healthcare Environment	3 credits
<p>This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.</p>		
HCI651	Database Management for Evidence-Based Decision Making	3 credits
<p>This course will assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>		

Must take one course as elective:

HCI502	Healthcare Delivery Systems	3 credits
<p>In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.</p>		
HCI503	Informatics Foundation and Health Care Technology	3 credits
<p>This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>		
HCI506	Health Policy and Informatics	3 credits
<p>This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.</p>		

HCI583	Virtual Engagement to Improve Health	3 credits
<p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>		
HCI584	Telehealth I	3 credits
<p>This is a foundational course that introduces students to telehealth services. Core concepts to be explored include telecommunications, technology infrastructure, and basic business requirements of implementing a telehealth service. Students will be introduced to designing telehealth encounters that promote health and wellness for both clinicians and consumers.</p>		
HCI586	Cybersecurity	3 credits
<p>Students will explore the cybersecurity needs within a health-related organization's IT infrastructure. Core concepts to be reviewed include cyber frameworks (exploitation, defense, threats etc.), cryptography, malware, and hacking. Students will gain a foundational awareness of the technical and managerial competencies needed to protect and secure database systems and information infrastructures.</p>		

2022-2023 Course Catalog

Nurse Educator Certificate

The Nurse Educator Certificate is a 12 credit professional certificate that provides the nurse with the basic educational tools necessary to teach nursing and/or nurses in an academic or clinical setting. The Certificate can be completed in two semesters.

Admission Requirements

- Completed free [online application](#).
- A BSN degree with a minimum 2.8 undergraduate GPA or 3.0 graduate GPA
- Proof of active, unencumbered nursing license in your state
- Official transcripts showing highest degree obtained

Admissions Materials may be submitted to:

Chatham University
Berry Hall/SCPS Admission
Woodland Road
Pittsburgh, PA 15232

[Email Admissions](#)

International Applicants

International Applicants must submit additional documentation to the Office of Admissions. A list of these documents can be found on the [International Admission](#) web page.

Learning Outcomes

At the completion of the program, the graduate will be able to:

1. Integrate emerging health care technologies into nursing education
2. Perform in curriculum design and evaluation of outcomes
3. Apply program concepts in the role of a nurse educator in the academic and clinical environment
4. Utilize various teaching strategies to facilitate learning

Curriculum

Major Requirements

12 credits

NUR503	Informatics Foundation and Health Care Technology	3 credits
	This course will assist students within the graduate program to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.	
NUR632	Curriculum Design and Evaluation in Nursing Education	3 credits
	This course focuses on the processes of curriculum development and evaluation that are critical responsibilities of nurse educators in schools of nursing, patient education programs, or staff development. Course goals include how the curriculum provides guidelines for program delivery and methods for evaluating program effectiveness.	
NUR642	Professional Role and Responsibility of the Nurse Educator	3 credits
	The professional role and responsibility of the nurse educator course focuses on diverse roles and practice environments experienced by nurse educators. The course will provide novice and experienced nurse educators with guidelines for practice in classroom, clinical, staff development, and various educational settings. Academic and institutional policies, protocols and legal aspects will be explored.	
NUR652	Teaching Strategies and Information Technology for the Nurse Educator	3 credits
	This course will focus on strategies to develop knowledge and skill sets in pedagogy, teaching-learning theories, testing and measurement, and various educational technologies. An in-depth introduction to information technology that supports practice and improves patient care and outcomes will be explored.	

2022-2023 Course Catalog

Telehealth Certificate of Completion

This online, 4-course (12 credits) certificate of completion was designed using URAC (Utilization Review Accreditation Commission) 7 Mandatory Measures and their Telemedicine v2.2 standards. Content will focus on different forms of telecommunication technology, project management, virtual engagement, and the protection and security of electronic health information. You may also transfer the 12 credits into the [Masters of Healthcare Informatics program](#).

Admission Requirements

- Completed [free online application](#)
- An earned bachelor's degree with a minimum 3.0 GPA
- Official transcripts showing highest degree obtained
- Resumé
- If living outside of the USA, applicants must meet minimum English proficiency scores (pBT 550, iBT 80, IELTS score of 6.0) and participate in a virtual interview (via Zoom, WeChat, or Skype)
- Official transcripts, graduation certificates and degree certificates must be in native language and be professional translated in English

Please note: All supporting documents must be copies of the official academic records issued in applicant's native language. If the institution of study issues academic records in English, please submit those as well. All documents must be submitted with literal word-for-word professional English translations for all documents issued.

Admissions materials may be submitted to:

Chatham University
Berry Hall
Woodland Road
Pittsburgh, PA 15232 USA
[Email](#)

Curriculum

Required:

HCI584	Telehealth I	3 credits
<p>This is a foundational course that introduces students to telehealth services. Core concepts to be explored include telecommunications, technology infrastructure, and basic business requirements of implementing a telehealth service. Students will be introduced to designing telehealth encounters that promote health and wellness for both clinicians and consumers.</p>		
HCI585	Telehealth II	3 credits
<p>This course explores advanced telehealth services and concepts such as regulatory, compliance, legal, and accreditation needs. Students will be exposed to legislative and state parity laws, licensing, and payment reimbursement processes. An in-depth look at real-world critical telemedicine services and contracting needs will be presented.</p> <p>Pre-requisites Complete the following course:</p> <ul style="list-style-type: none"> • HCI584 Telehealth I 		
HCI504	Project Management	3 credits
<p>Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.</p>		

Must take one course as elective:

HCI502	Healthcare Delivery Systems	3 credits
<p>In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.</p>		
HCI503	Informatics Foundation and Health Care Technology	3 credits
<p>This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>		
HCI506	Health Policy and Informatics	3 credits
<p>This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.</p>		

HCI631	Integrating Technology into a Healthcare Environment	3 credits
<p>This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.</p>		
HCI651	Database Management for Evidence-Based Decision Making	3 credits
<p>This course will assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>		
HCI583	Virtual Engagement to Improve Health	3 credits
<p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>		
HCI586	Cybersecurity	3 credits
<p>Students will explore the cybersecurity needs within a health-related organization's IT infrastructure. Core concepts to be reviewed include cyber frameworks (exploitation, defense, threats etc.), cryptography, malware, and hacking. Students will gain a foundational awareness of the technical and managerial competencies needed to protect and secure database systems and information infrastructures.</p>		

2022-2023 Course Catalog

Travel Writing

The Master of Fine Arts in Creative Writing offers a new post-baccalaureate certificate in Travel Writing. This certificate requires 12 credit hours and can be completed in one year in full or low-residency format.

Admission Requirements

Pre-requisite:

- Have a completed baccalaureate degree from an accredited college or university, with an overall undergraduate grade point average (GPA) of 3.0 or above on a 4.0 scale.
If a student has below a 3.0 GPA, please feel free to apply if you show extreme promise through other achievements. Additional Admissions documents may be requested.

Completed application for admission by the posted deadline, including:

- [Online application](#)
- Admissions Essay (current prompt found in application portal)
- Curriculum vita or Resume
- Official transcripts from all colleges and universities attended
- 10-page prose sample

Admissions Materials can be uploaded in the application or submitted to: Chatham University

Office of Graduate Admission-Berry Hall

Woodland Road

Pittsburgh, PA 15232

[Email Admissions](#)

International Applicants

International Applicants must submit additional documentation to the Office of Admissions. A list of these documents can be found on the [International Admission](#) web page.

Curriculum

Required Courses

ENG709 Summer Community of Writers **3 credits**

This ten-day residency in Pittsburgh is particularly tailored towards ACT 48 educators or students seeking elective credit. Daily attendance in genre-specific writing workshops and conferences with visiting authors is required. Craft sessions, lectures and readings are available but optional.

ENG585 Travel Writing **3 credits**

This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.

ENG582 The Art and Craft of Narrative **3 credits**

Readings and writing in this multi-genre course will focus on constructing narratives in fiction, nonfiction, poetry or writing for children. Students will be introduced to the workshop method and given instruction on sending work out for publication.

OR

ENG583 The Art and Craft of the Lyric **3 credits**

Readings and writing in this multi-genre course will focus on writing lyrically in poetry and prose. Students will be introduced to the workshop method and given instruction on sending work out for publication.

OR

ENG523 The Craft of Creative Writing: Multiple Genres **3 credits**

This course may substitute for any other craft course for students specializing in any genre. Students will be introduced to the craft of poetry, fiction, and non-fiction, and will also be introduced to the workshop method and given instruction on sending out work for publication.

OR

ENG683 Special Topics **3 credits**

Literature Courses on differing topics, usually thematically based.

ENG674 Field Seminar: International**3 credits**

The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will always be outside the United States. May be repeated for credit. Additional fee(s): Field Seminar fee.

OR

ENG693 Independent Study**3 credits**

Independent study on topics of the student's choosing.

Pre-requisites Complete the following course:

- XXX123 Permission of Instructor

2022-2023 Course Catalog

Future Teachers Program

A partnership between [Neighborhood Learning Alliance](#) and Chatham University, Chatham Future Teachers is a long-term program that encourages and supports high school students of color in becoming elementary or high school teachers.

From 10th grade through college graduation, Chatham Future Teachers ensures that students have the academic preparation, professional exposure, and personal and financial support necessary to transition from high school to college, and from college into careers as teachers.

Students who successfully complete the program enter Chatham's undergraduate teaching program having already earned up to 18 credits toward their undergraduate degree.

The program begins in 10th grade, when students of color with at least a 3.0 GPA and their families are invited to learn about the Chatham Future Teachers opportunity.

Curriculum

Requirements

EDU104	Perspectives on Education	3 credits
Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee		
MTH103	Mathematical Reasoning	3 credits
This course is designed for the non-science major, to give a new outlook on mathematics and to provide a sense of the beauty and applicability of mathematics in our world. Topics are primarily related to geometry and include shapes in two and three dimensions, conic sections, topology, fractals and applied geometry.		
ENG105	First-Year Writing	3 credits
This introduction to college composition covers analytical and argumentative writing, oral presentation, critical reading, information literacy, and academic integrity. The course employs active-learning pedagogy of discussion and dialogue and examines intersections of race, gender, class, ethnicities, and systems of belief through the lens of relevant topics. Students who need additional support with writing skills beyond what is normally covered in the classroom (based on a diagnostic writing exam required before matriculation) will require Supplemental instruction through the PACE Center. Students with transfer credits may meet the requirement for ENG105 with the transfer of a college-level composition course or AP/IB credit.		

EDU234	Inclusion: Issues and Strategies	3 credits
<p>This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.</p>		
MTH104	Statistics for Everyday Life	3 credits
<p>One semester course covering descriptive statistics, statistical measures and distributions, decision making under uncertainty, applications of probability to statistical inference, and linear correlation. Particular emphasis on examples drawn from real world situations. Fulfills Chatham's quantitative reasoning requirement.</p>		
EDU105	Child Development: Birth Through Grade 4	3 credits
<p>This course addresses physical, social, cognitive, and moral development from prenatal stages through middle childhood. Students examine child development in the context of social, cultural, instructional settings. Using case studies, the implications of growth and development on instructional planning for effective learning is achieved. Students learn to create environments that are healthy, respectful, supportive and challenging for all children.</p>		
ENG287	African-American Writers	3 credits
<p>This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnutt, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition.</p> <p>Pre-requisites Complete any 1 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 Introduction to Literary Studies • ENG105 First-Year Writing 		

Chatham University Academic Calendar

2022-2023 Universal Academic Calendar

Fall 2022 Term

15-week term

First day of classes

Monday, August 29

Labor Day - **HOLIDAY, No classes**

Monday, September 5

Add/drop period ends

Tuesday, September 6

Long Weekend

Saturday-Tuesday, October 8-11

Midterm undergraduate grades, before 12:00 Noon

Friday, October 14

Incomplete grades from Spring/Summer 2022, before 12:00 Noon

Friday, October 14

Registration for degree-seeking students for Spring 2023

Tuesday-Friday, November 8-18

Registration for non-degree students for Spring 2023

Tuesday, November 22

Last day to apply for Fall 2022 (December) degree conferral

Tuesday, November 15

Last day to withdraw

Wednesday, November 16

Thanksgiving Break

Wed-Sun, November 23-27

Last day of classes

Friday, December 16

Commencement Ceremony, 11:00 a.m.

Saturday, December 17

Last day to submit grades, before 12:00 Noon

Monday, December 19

Late registration for Spring 2023 begins

Monday, December 19

Degree conferral for Fall 2022 graduates

Friday, December 30

Diplomas mailed during week of

Monday, January 16

1st 7.5-week term

First day of classes

Monday, August 29

Labor Day - **HOLIDAY, no classes**

Monday, September 5

Add/drop period ends

Tuesday, September 6

Last day to withdraw

Tuesday, October 4

Last day of classes

Tuesday, October 18

Last day to submit grades, before 12:00 Noon

Thursday, October 20

2nd 7.5-week term

First day of classes

Thursday, October 20

Add/drop period ends

Thursday, October 27

Thanksgiving Break

Wed-Sun, November 23-27

Last day to withdraw

Friday, December 2

Last day of classes

Friday, December 16

Last day to submit grades, before 12:00 Noon

Monday, December 19

1st 5-week term

First day of classes

Monday, August 29

Labor Day - **HOLIDAY - no classes**

Monday, September 5

Add/drop period ends

Tuesday, September 6

Last day to withdraw

Friday, September 23

Last day of classes

Friday, September 30

Last day to submit grades, before 12:00 Noon

Monday, October 3

2nd 5-week term

First day of classes

Monday, October 3

Add/drop period ends

Monday, October 10

Last day to withdraw

Friday, October 28

Last day of classes

Friday, November 4

Last day to submit grades, before 12:00 Noon

Monday, November 7

3rd 5-week term

First day of classes

Monday, November 7

Add/drop period ends

Monday, November 14

Thanksgiving Break

Wed-Sun, November 23-27

Last day to withdraw

Friday, December 9

Last day of classes

Friday, December 16

Last day to submit grades, before 12:00 Noon

Monday, December 19

Spring 2023 Term

15-week term

First day of classes

Wednesday, January 4

Add/drop period ends

Wednesday, January 11

Martin Luther King Day - **HOLIDAY, no classes**

Monday, January 16

Registration for Summer 2023

Thursday, February 2

Midterm undergraduate grades, before 12:00 Noon

Friday, February 24

Incomplete grades for Fall 2022, before 12:00 Noon

Friday, February 24

Spring Break

Sun-Sun, February 26-March 5

Registration for degree-seeking students for Fall 2023

Tuesday-Friday, March 7-17

Registration for non-degree students for Fall 2023

Tuesday, March 21

Last day to apply for Spring 2023 (May) degree conferral

Wednesday, March 15

Last day to withdraw

Tuesday, March 21

Last day of classes

Friday, April 21

Commencement Ceremony, 1:00 p.m.

Sunday, April 23

Last day to submit grades, before 12:00 Noon

Monday, April 24

Late registration for Fall 2023 begins

Monday, April 24

Degree conferral for Spring 2023 graduates

Tuesday, May 30

Diplomas mailed during week of

Monday, June 19

1st 7.5-week term

First day of classes

Wednesday, January 4

Add/drop period ends

Wednesday, January 11

Martin Luther King Day - **HOLIDAY, no classes**

Monday, January 16

Last day to withdraw

Friday, February 10

Last day of classes

Friday, February 24

Last day to submit grades, before 12:00 Noon

Monday, February 27

2nd 7.5-week term (Partial Spring Break is observed)

First day of classes

Wednesday, March 1

Add/drop period ends

Wednesday, March 8

Last day to withdraw

Friday, April 7

Last day of classes

Friday, April 21

Last day to submit grades, before 12:00 Noon

Monday, April 24

1st 5-week term

First day of classes

Wednesday, January 4

Add/drop period ends

Wednesday, January 11

Last day to withdraw

Friday, January 27

Last day of classes

Friday, February 3

Last day to submit grades, before 12:00 Noon

Monday, February 6

2nd 5-week term

First day of classes

Monday, February 6

Add/drop period ends

Monday, February 13

Last day to withdraw

Friday, March 3

Last day of classes

Friday, March 10

Last day to submit grades, before 12:00 Noon

Monday, March 13

3rd 5-week term

First day of classes

Monday, March 13

Add/drop period ends

Monday, March 20

Last day to withdraw

Friday, April 7

Last day of classes

Friday, April 14

Last day to submit grades, before 12:00 Noon

Monday, April 17

Summer 2023

15-week term

First day of classes

Monday, April 24

Add/drop period ends

Monday, May 1

Memorial Day - **HOLIDAY, no classes**

Monday, May 29

Juneteenth - **HOLIDAY, no classes**

Monday, June 19

Last day to apply for Summer 2023 (August) degree conferral

Thursday, June 15

4th of July - **HOLIDAY, no classes**

Tuesday, July 4

Last day to withdraw

Wednesday, July 5

Last day of classes

Friday, August 4

Last day to submit grades, before 12:00 Noon

Monday, August 7

Degree conferrals for Summer 2023

Wednesday, August 30

Diplomas mailed during week of

Monday, September 18

10-week term (ELP)

First day of classes

Tuesday, May 30

Add/drop period ends

Tuesday, June 6

Juneteenth - **HOLIDAY, no classes**

Monday, June 19

4th of July - **HOLIDAY, no classes**

Tuesday, July 4

Last day to withdraw

Friday, July 14

Last day of classes

Friday, August 4

Last day to submit grades, before 12:00 Noon

Monday, August 7

1st 7.5-week term

First day of classes

Monday, April 24

Add/drop period ends

Monday, May 1

Memorial Day - **HOLIDAY, no classes**

Monday, May 29

Last day to withdraw

Tuesday, May 30

Last day of classes

Tuesday, June 13

Last day to submit grades, before 12:00 Noon

Thursday, June 15

2nd 7.5-week term

First day of classes

Thursday, June 15

Juneteenth - **HOLIDAY, no classes**

Monday, June 19

Add/drop period ends

Thursday, June 22

4th of July - **HOLIDAY, no classes**

Tuesday, July 4

Last day to withdraw

Friday, July 21

Last day of classes

Friday, August 4

Last day to submit grades, before 12:00 Noon

Monday, August 7

1st 5-week term

First day of classes

Monday, April 24

Add/drop period ends

Monday, May 1

Last day to withdraw

Friday, May 19

Last day of classes

Friday, May 26

Last day to submit grades, before 12:00 Noon

Monday, May 29

2nd 5-week term

First day of classes

Monday, June 5

Add/drop period ends

Monday, June 12

Last day to withdraw

Friday, June 30

Last day of classes

Friday, July 7

Last day to submit grades, before 12:00 Noon

Monday, July 10

3rd 5-week term

First day of classes

Monday, July 10

Add/drop period ends

Monday, July 17

Last day to withdraw

Friday, August 4

Last day of classes

Friday, August 11

Last day to submit grades, before 12:00 Noon

Monday, August 14

1st 3-week term

First day of classes

Monday, April 24

Add/drop period ends

Wednesday, April 26

Last day to withdraw

Friday, April 28

Last day of classes

Friday, May 12

Last day to submit grades, before 12:00 Noon

Monday, May 15

2nd 3-week term

First day of classes

Monday, July 31

Add/drop period ends

Wednesday, August 2

Last day to withdraw

Friday, August 4

Last day of classes

Friday, August 18

Last day to submit grades, before 12:00 Noon

Monday, August 21

2023-2024 Universal Academic Calendar

Fall 2023 Term

15-week term

First day of classes

Monday, August
28

Labor Day - **HOLIDAY, no classes**

Monday,
September 4

Add/drop period ends

Tuesday,
September 5

Long Weekend

TBD

Midterm undergraduate grades, before 12:00 noon	Friday, October 13
Incomplete grades from Spring/Summer 2023, before 12:00 noon	Friday, October 13
Registration for degree-seeking students for Spring 2024	Tuesday-Friday, November 7-17
Registration for non-degree students for Spring 2024	Tuesday, November 21
Last day to apply for Fall 2023 (December) degree conferral	Wednesday, November 15
Last day to withdraw	Thursday, November 16
Thanksgiving Break	Wed-Sun, November 22-26
Last day of classes	Friday, December 15
Commencement Ceremony, Time TBD	Saturday, December 16
Late registration for Spring 2024 begins	Monday, December 18
Last day to submit grades, before 12:00 noon	Tuesday, December 19

Degree conferral for Fall 2023 graduates

Saturday,
December 30

Diplomas mailed during the week of

Monday,
January 22

1st 7.5-week term

First day of classes

Monday, August
28

Labor Day - **HOLIDAY, no classes**

Monday,
September 4

Add/drop period ends

Tuesday,
September 5

Last day to withdraw

Tuesday,
October 3

Last day of classes

Tuesday,
October 17

Last day to submit grades, before 12:00 noon

Thursday,
October 19

2nd 7.5-week term

First day of classes	Thursday, October 19
Add/drop period ends	Thursday, October 26
Thanksgiving Break	Wed-Sun, November 22- 26
Last day to withdraw	Friday, December 1
Last day of classes	Friday, December 15
Last day to submit grades, before 12:00 noon	Tuesday, December 19
<i>1st 5-week term</i>	
First day of classes	Monday, August 28
Labor Day - HOLIDAY, no classes	Monday, September 4
Add/drop period ends	Tuesday, September 5

Last day to withdraw	Friday, September 22
Last day of classes	Friday, September 29
Last day to submit grades, before 12:00 noon	Monday, October 2

2nd 5-week term

First day of classes	Monday, October 2
Add/drop period ends	Monday, October 9
Last day to withdraw	Friday, October 27
Last day of classes	Friday, November 3
Last day to submit grades, before 12:00 noon	Monday, November 6

3rd 5-week term

First day of classes	Monday, November 6
Add/drop period ends	Monday, November 13
Thanksgiving Break	Wed-Sun, November 22- 26
Last day to withdraw	Friday, December 8
Last day of classes	Friday, December 15
Last day to submit grades, before 12:00 noon	Tuesday, December 19

Spring 2024 Term

15-week term

First day of classes	Monday, January 8
Martin Luther King Day - HOLIDAY, no classes	Monday, January 15

Add/drop period ends	Tuesday, January 16
Registration for Summer 2024	Friday, February 2
Midterm undergraduate grades, before 12:00 noon	Friday, March 1
Incomplete grades for Fall 2023, before 12:00 noon	Friday, March 1
Spring Break	Sun-Sun, March 3-10
Registration for degree-seeking students for Fall 2024	Tuesday-Friday, March 12-22
Registration for non-degree students for Fall 2024	Tuesday, March 26
Last day to apply for Spring 2024 (May) degree conferral	Friday, March 15
Last day to withdraw	Tuesday, March 26
Last day of classes	Friday, April 26
Commencement Ceremony, 1:00 pm	Sunday, April 28
Late registration for Fall 2024 begins	Monday, April 29

Last day to submit grades, before 12:00 noon	Tuesday, April 30
Degree conferral for Spring 2024 graduates	Thursday, May 30
Diplomas mailed during the week of	Monday, June 24
<i>1st 7.5-week term</i>	
First day of classes	Monday, January 8
Martin Luther King Day - HOLIDAY, no classes	Monday, January 15
Add/drop period ends	Tuesday, January 16
Last day to withdraw	Tuesday, February 13
Last day of classes	Tuesday, February 27
Last day to submit grades, before 12:00 noon	Thursday, February 29

2nd 7.5-week term

First day of classes

Thursday,
February 29

Spring Break

Sun-Sun, March
3-10

Add/drop period ends

Thursday, March
14

Last day to withdraw

Friday, April 12

Last day of classes

Friday, April 26

Last day to submit grades, before 12:00 noon

Tuesday, April
30

1st 5-week term

First day of classes

Monday,
January 8

Add/drop period ends

Tuesday,
January 15

Last day to withdraw

Friday, February
2

Last day of classes

Friday, February
9

Last day to submit grades, before 12:00 noon

Monday,
February 12

2nd 5-week term (Spring Break Not Observed)

First day of classes

Monday,
February 12

Add/drop period ends

Monday,
February 19

Last day to withdraw

Friday, March 8

Last day of classes

Friday, March 15

Last day to submit grades, before 12:00 noon

Monday, March
18

3rd 5-week term

First day of classes

Monday, March
18

Add/drop period ends	Monday, March 25
Last day to withdraw	Friday, April 12
Last day of classes	Friday, April 19
Last day to submit grades, before 12:00 noon	Monday, April 22

Summer 2024 Term

15-week term

First day of classes	Wednesday, May 1
Add/drop period ends	Wednesday, May 8
Memorial Day - HOLIDAY, no classes	Monday, May 27
Last day to apply for Summer 2024 (August) degree conferral	Saturday, June 15
Juneteenth - HOLIDAY, no classes	Wednesday, June 19
4th of July - HOLIDAY, no classes	Thursday, July 4

Last day to withdraw	Tuesday, July 16
Last day of classes	Friday, August 16
Last day to submit grades, before 12:00 noon	Tuesday, August 20
Degree conferrals for Summer 2022	Friday, August 30
Diplomas mailed during the week of	Monday, September 23
<i>10-week semester (ELP)</i>	
First day of classes	Tuesday, May 28
Add/drop period ends	Tuesday, June 4
Juneteenth - HOLIDAY, no classes	Wednesday, June 19
4th of July - HOLIDAY, no classes	Thursday, July 4
Last day to withdraw	Friday, July 12
Last day of classes	Friday, August 2

Last day to submit grades, before 12:00 noon

Tuesday, August
6

1st 7.5-week term

First day of classes

Wednesday, May
1

Add/drop period ends

Wednesday, May
8

Memorial Day - **HOLIDAY, no classes**

Monday, May 27

Last day to withdraw

Friday, June 7

Juneteenth - **HOLIDAY, no classes**

Wednesday,
June 19

Last day of classes

Friday, June 21

Last day to submit grades, before 12:00 noon

Tuesday, June
25

2nd 7.5-week term

First day of classes

Wednesday,
June 26

Add/drop period ends	Wednesday, July 3
4th of July- HOLIDAY, no classes	Thursday, July 4
Last day to withdraw	Friday, August 2
Last day of classes	Friday, August 16
Last day to submit grades, before 12:00 noon	Tuesday, August 20
<i>1st 5-week term</i>	
First day of classes	Wednesday, May 1
Add/drop period ends	Wednesday, May 8
Last day to withdraw	Wednesday, May 29
Last day of classes	Wednesday, June 5
Last day to submit grades, before 12:00 noon	Friday, June 7

2nd 5-week term

First day of classes	Monday, June 10
Add/drop period ends	Monday, June 17
Last day to withdraw	Friday, July 5
Last day of classes	Friday, July 12
Last day to submit grades, before 12:00 noon	Monday, July 15

3rd 5-week term

First day of classes	Monday, July 15
Add/drop period ends	Monday, July 22
Last day to withdraw	Friday, August 9
Last day of classes	Friday, August 16
Last day to submit grades, before 12:00 noon	Tuesday, August 20

1st 3-week term

First day of classes Wednesday, May
1

Add/drop period ends Friday, May 3

Last day to withdraw Tuesday, May 7

Last day of classes Tuesday, May 21

Last day to submit grades, before 12:00 noon Thursday, May
23

2nd 3-week term

First day of classes Monday, July 29

Add/drop period ends Wednesday, July
31

Last day to withdraw Friday, August 2

Last day of classes Friday, August
16

Last day to submit grades, before 12:00 noon

Tuesday, August
20

Archive: 2021-2022 Academic Calendar

Fall 2021 Term

15-week term

First day of classes

Monday, August 23

Add/drop period ends

Tuesday, August 31

Labor Day - **HOLIDAY, no classes**

Monday, September 6

Long Weekend

Saturday-Tuesday, October 2-5, 2021

Midterm undergraduate grades, before 12:00 noon

Friday, October 8

Incomplete grades from Spring/Summer 2021, before 12:00 noon

Friday, October 8

Registration for degree-seeking students for Spring 2022

Tues-Fri, Nov 2-12

Registration for non-degree students for Spring 2022

Tuesday, November 16

Last day to withdraw

Wednesday, November 10

Last day to apply for Fall 2021 (December) degree conferral

Monday, November 15

Thanksgiving Break

Wed-Sun, Nov 24-Nov 28

Last day of classes

Friday, December 10

Commencement Ceremony, 2:00 PM

Friday, December 10

Last day to submit grades, before 12:00 noon

Monday, December 13

Late registration for Spring 2022 begins

Monday, December 13

Degree conferral for Fall 2021 graduates

Thursday, December 30

Diplomas mailed during the week of

Monday, January 10

First 7.5-week term

First day of classes

Monday, August 23

Add/drop period ends

Tuesday, August 31

Labor Day - **HOLIDAY, no classes**

Monday, September 6

Last day to withdraw

Tuesday, September 28

Last day of classes

Tuesday, October 12

Last day to submit grades, before 12:00 noon

Thursday, October 14

Second 7.5-week term

First day of classes

Thursday, October 14

Add/drop period ends

Thursday, October 21

Last day to withdraw

Tuesday, November 23

Thanksgiving Break

Wed-Sun, Nov 24-Nov 28

Last day of classes

Friday, December 10

Last day to submit grades, before 12:00 noon

Monday, December 13

First 5-week term

First day of classes

Monday, August 23

Add/drop period ends

Tuesday, August 31

Labor Day - **HOLIDAY, no classes**

Monday, September 6

Last day to withdraw

Friday, September 17

Last day of classes

Friday, September 24

Last day to submit grades, before 12:00 noon

Monday, September 27

Second 5-week term

First day of classes

Monday, September 27

Add/drop period ends

Monday, October 4

Last day to withdraw

Friday, October 22

Last day of classes

Friday, October 29

Last day to submit grades, before 12:00 noon

Monday, November 1

Third 5-week term

First day of classes

Monday, November 1

Add/drop period ends

Monday, November 8

Thanksgiving Break

Wed-Sun-November 24-28

Last day to withdraw

Friday, December 3

Last day of classes

Friday, December 10

Last day to submit grades, before 12:00 noon

Monday, December 13

Spring 2022 Term

15-week term

First day of classes

Wednesday, January 5

Add/drop period ends

Wednesday, January 12

Martin Luther King Day - **HOLIDAY, no classes**

Monday, January 17

Registration for Summer 2022

Wednesday, February 9

Midterm undergraduate grades, before 12:00 noon

Friday, February 25

Incomplete grades for Fall 2021, before 12:00 noon

Friday, February 25

Spring Break

Sun-Sun, February 27-March 6

Registration for degree-seeking students for Fall 2022

Tuesday-Friday, March 8-18

Registration for non-degree students for Fall 2022

Tuesday, March 22

Last day to apply for Spring 2022 (May) degree conferral

Tuesday, March 22

Last day to withdraw

Tuesday, March 22

Last day of classes

Friday, April 22

Commencement Ceremony, 1:00 PM

Sunday, April 24

Last day to submit grades, before 12:00 noon

Monday, April 25

Late registration for Fall 2022 begins

Monday, April 25

Degree conferral for Spring 2022 graduates

Monday, May 30

Diplomas mailed during the week of

Monday, June 27

First 7.5-week term

First day of classes

Wednesday, January 5

Add/drop period ends

Wednesday, January 12

Martin Luther King Day - **HOLIDAY, no classes**

Monday, January 17

Last day to withdraw

Friday, February 11

Last day of classes

Friday, February 25

Last day to submit grades, before 12:00 noon

Monday, February 28

Second 7.5-week term (Partial Spring Break is observed)

First day of classes

Thursday, March 3

Add/drop period ends

Thursday, March 10

Last day to withdraw

Friday, April 8

Last day of classes

Friday, April 22

Last day to submit grades, before 12:00 noon

Monday, April 25

First 5-week term

First day of classes

Wednesday, January 5

Add/drop period ends

Wednesday, January 12

Last day to withdraw

Friday, January 28

Last day of classes

Friday, February 4

Last day to submit grades, before 12:00 noon

Monday, February 7

Second 5-week term

First day of classes

Monday, February 7

Add/drop period ends

Monday, February 14

Last day to withdraw

Friday, March 4

Last day of classes

Friday, March 11

Last day to submit grades, before 12:00 noon

Monday, March 14

Third 5-week term

First day of classes

Monday, March 14

Add/drop period ends

Monday, March 21

Last day to withdraw

Friday, April 8

Last day of classes

Friday, April 15

Last day to submit grades, before 12:00 noon

Monday, April 18

Summer 2022 Term

15-week term

First day of classes

Monday, April 25

Add/drop period ends

Monday, May 2

Memorial Day - **HOLIDAY, no classes**

Monday, May 30

Last day to apply for Summer 2022 (August)
degree conferral

Wednesday, June 15

Juneteenth - **HOLIDAY, no classes**

Monday, June 20

4th of July - **HOLIDAY, no classes**

Monday, July 4

Last day to withdraw

Tuesday, July 5

Last day of classes

Friday, August 5

Last day to submit grades, before 12:00 noon

Monday, August 8

Degree conferrals for Summer 2022

Tuesday, August 30

Diplomas mailed during the week of

Monday, September
12

10-week term (ELP)

First day of classes

Tuesday, May 31

Add/drop period ends

Tuesday, June 7

Juneteenth - **HOLIDAY, no classes**

Monday, June 20

4th of July - **HOLIDAY, no classes**

Monday, July 4

Last day to withdraw

Friday, July 15

Last day of classes

Friday, August 5

Last day to submit grades, before 12:00 noon

Monday, August 8

First 7.5-week term

First day of classes

Monday, April 25

Add/drop period ends

Monday, May 2

Memorial Day - **HOLIDAY, no classes**

Monday, May 30

Last day to withdraw

Tuesday, May 31

Last day of classes

Tuesday, June 14

Last day to submit grades, before 12:00 noon

Thursday, June 16

Second 7.5-week term

First day of classes

Thursday, June 16

Juneteenth - **HOLIDAY, no classes**

Monday, June 20

Add/drop period ends

Thursday, June 23

4th of July - **HOLIDAY, no classes**

Monday, July 4

Last day to withdraw

Friday, July 22

Last day of classes

Friday, August 5

Last day to submit grades, before 12:00 noon

Monday, August 8

First 5-week term

First day of classes

Monday, April 25

Add/drop period ends

Monday, May 2

Last day to withdraw

Friday, May 20

Last day of classes

Friday, May 27

Last day to submit grades, before 12:00 noon

Monday, May 30

Second 5-week term

First day of classes

Monday, June 6

Add/drop period ends

Monday, June 13

Last day to withdraw

Friday, July 1

Last day of classes

Friday, July 8

Last day to submit grades, before 12:00 noon

Monday, July 11

Third 5-week term

First day of classes

Monday, July 11

Add/drop period ends

Monday, July 18

Last day to withdraw

Friday, August 5

Last day of classes

Friday, August 12

Last day to submit grades, before 12:00 noon

Monday, August 15

First 3-week term

First day of classes

Monday, April 25

Add/drop period ends

Wednesday, April 27

Last day to withdraw

Friday, April 29

Last day of classes

Friday, May 13

Last day to submit grades, before 12:00 noon

Monday, May 16

Second 3-week term

First day of classes

Monday, June 13

Add/drop period ends

Wednesday, June 15

Last day to withdraw

Friday, June 17

Last day of classes

Friday, July 1

Last day to submit grades, before 12:00 noon

Tuesday, July 5

Third 3-week term

First day of classes

Monday, August 1

Add/drop period ends

Wednesday, August 3

Last day to withdraw

Friday, August 5

Last day of classes

Friday, August 19

Last day to submit grades, before 12:00 noon

Monday, August 22

course catalog/ 2022-2023 Catalog

2022-2023 Course Listing

Course Code	Course Information	Credits
ACT222	<p>FINANCIAL ACCOUNTING PRINCIPLES I</p> <p>This course represents an introduction to accounting principles including the accounting process, double-entry bookkeeping, adjusting entries, and the preparation of financial statements. The objectives of this course are to make students aware of the importance of accounting information in every type of organization (private business, not-for-profit, and governmental).</p>	3
ACT223	<p>MANAGERIAL ACCOUNTING PRINCIPLES</p> <p>This course represents an introduction to managerial accounting concepts, including cost allocation and measurement, cost/volume profit analysis, budgeting, variance analysis, job and process costing, and capital budgeting.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 : Financial Accounting Principles I 	3
ACT322	<p>INTERMEDIATE ACCOUNTING I</p> <p>This course engages the student in a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students will examine the nature, composition, valuation, and classification of balance sheet items.</p>	3

Course Code	Course Information	Credits
ACT323	<p>INTERMEDIATE ACCOUNTING II</p> <p>This course is a comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of various liability and equity accounts. Students examine the nature, composition, valuation, and classification of these accounts as well as important financial reporting concepts, proper financial statement presentation, and related disclosures.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ACT322 : Intermediate Accounting I 	3
ACT324	<p>INDIVIDUAL TAX ACCOUNTING</p> <p>The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organization (e.g., corporations, partnerships). The focus of the course is on developing knowledge of tax law and its application.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 : Financial Accounting Principles I 	3
ACT412	<p>AUDITING</p> <p>The course engages the student in a study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ACT323 : Intermediate Accounting II 	3
ACT480	ACCOUNTING INFORMATION SYSTEMS	3

Course Code	Course Information	Credits
	<p>This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 : Financial Accounting Principles I 	
ACT490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS310W : Business Analytics: Research Methods • BUS312W : Marketing Research 	3
ACT498	<p>TUTORIAL: ACCOUNTING</p> <p>Tutorial: Accounting</p>	4
ACT499	<p>TUTORIAL: ACCOUNTING</p> <p>Tutorial: Accounting</p>	4

Course Code	Course Information	Credits
ACT510	<p>ACCOUNTING FUNDAMENTALS</p> <p>An accelerated study of accounting and financial management issues and techniques to provide insight into the financial performance of organizations. The course is a comprehensive study of the preparation, interpretation, analysis, and use of accounting statements and financial information.</p>	3
ACT512	<p>AUDITING</p> <p>This course engages the student in a comprehensive study of auditing objectives, standards, and procedures employed in the examination of business enterprises and verification of their financial statements. Topics include an evaluation of internal control, preparation of work papers, report writing, professional ethics, and current auditing trends.</p>	3
ACT519	<p>INTERMEDIATE ACCOUNTING I</p> <p>A comprehensive study of generally accepted accounting principles as they relate to the measurement and reporting of assets and income. Students examine the nature, composition, valuation, and classification of balance sheet items.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ACT510 : Accounting Fundamentals 	3
ACT523	<p>INTERMEDIATE ACCOUNTING II</p> <p>This course continues from Intermediate Accounting I with the application of generally accepted accounting principles to liability and equity accounts including accounting for intangibles, bonds, debts and loans, partnerships, corporations, and analysis of working capital.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ACT519 : Intermediate Accounting I 	3

Course Code	Course Information	Credits
ACT524	FEDERAL TAX ACCOUNTING	3
	<p>The focus of the course is on developing knowledge of tax law and its applications. The primary emphasis of the course is on the income taxation of individuals, but the course also includes an overview of the federal taxation of other forms of business organizations (e.g. corporations, partnerships).</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ACT510 : Accounting Fundamentals 	
ACT540	GOVERNMENT AND NON-PROFIT ACCOUNTING	3
	<p>This course's focus is upon the principles of fund accounting and the financial reporting, budgeting and auditing of both public and private not-for-profit organizations. Particular attention is given to accounting procedures for the activities of state and local governments, but the course also considers other not-for-profit entities.</p>	
ACT545	ACCOUNTING THEORY	3
	<p>This course encourages students to take a conceptual view of accounting, urging them to get beyond the process and to grasp the reasoning behind the accounting procedures. The focus is upon what it means for accounting to be a source of information and providing a framework for evaluating accounting alternatives.</p>	
ACT573	BUSINESS LAW AND ETHICS	3
	<p>This course provides students with a broad-based understanding of legal issues that affect modern businesses. The course covers the following substantive law areas: Choice of Entity, Corporate Governance, Raising Money, Securities Regulation, Bankruptcy, Contracts, Intellectual Property and Employment Law.</p>	

Course Code	Course Information	Credits
ACT580	<p>ACCOUNTING INFORMATION SYSTEMS</p> <p>This course examines critical business processes and IT audits through theories of Accounting Information Systems (AIS) and using auditing tools and enterprise systems. Case analyses and project assignments nurture professional competence in communicating objectives and procedures through systems documentation techniques, systems analysis and design methodologies, and information processing.</p>	3
ACT620	<p>ADVANCED FINANCIAL ACCOUNTING</p> <p>This course introduces the student to many advanced financial accounting issues. Includes the application of GAAP rules for consolidation of inter-corporate acquisitions and investments in other entities, multi-national accounting issues involving foreign currency transactions and translation of foreign entity statements, accounting for partnerships, and segment and interim reporting requirements.</p>	3
ACT625	<p>COST ANALYSIS</p> <p>Cost Analysis introduces students to the role cost considerations play in management decision making. Topics include the classification and allocation of costs, job order and process costing, standard costs, budgeting and planning, cost-volume-profit analysis, and using costs as performance measurements.</p>	3
ACT630	<p>ADVANCED TAX ACCOUNTING</p> <p>This course is designed to introduce students to advanced strategies in taxation. The course's focus is upon how tax research is performed and the basic concepts underlying the strategic tax planning. Tax issues associated with new businesses, business operation, growth, expansion, termination, and liquidations and estate planning are examined.</p>	3

Course Code	Course Information	Credits
ACT640	<p>GOVERNMENT AND NOT-FOR-PROFIT ACCOUNTING</p> <p>This course's focus is upon the principles of fund accounting and the financial reporting, budgeting and auditing of both public and private not-for-profit organizations. Particular attention is given to accounting procedures for the activities of state and local governments, but the course also considers other not-for-profit entities.</p>	3
ACT645	<p>ACCOUNTING THEORY</p> <p>This course encourages students to take a more conceptual view of accounting, urging them to get beyond the process and to grasp the reasoning behind the accounting procedures. The focus is upon what it means for accounting to be a source of information and providing a framework for evaluating accounting alternatives.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ACT523 : Intermediate Accounting II 	3
ACT650	<p>MANAGERIAL ACCOUNTING</p> <p>This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ACT510 : Accounting Fundamentals • BUS507 : Accounting Essentials 	3
ACT660	<p>PREPARING FOR THE CPA EXAM</p> <p>This course will familiarize students with the structure and substance of the CPA exam. Students' current level of preparation for the CPA exam will be tested through use of</p>	3

Course Code	Course Information	Credits
	<p>sample CPA exams. Test results will be used to assist students in developing individualized exam preparation plans.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • ACT519 : Intermediate Accounting I • ACT523 : Intermediate Accounting II • ACT524 : Federal Tax Accounting • ACT531 : Auditing 	
ACT699	<p>FORENSIC ACCOUNTING</p> <p>Focuses on preventing, detecting, and investigating common types of internal and external fraud. Designed to cultivate advanced understanding methods of analysis of financial crime allegations. Provides the culminating experience of Chatham University's MAcc program. Should be one of the last courses taken in the MAcc Program.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • ACT573 : Business Law and Ethics • ACT620 : Advanced Financial Accounting • ACT630 : Advanced Tax Accounting 	3
ART103	<p>INTRO TO VISUAL CULTURE</p> <p>Visual Culture can be understood as the practice of scrutinizing visual items in both elite and popular culture; of determining how and what they mean to a variety of audiences; and of examining how those meanings might slip, change, or be changed according to both context and audience. Students examine a broad range of visual materials - from paintings to films - through the term of study.</p>	3
ART111	<p>CERAMICS I</p> <p>This studio course provides students with an introduction to ceramic processes and materials. Instruction in beginning wheel-throwing methods augments competency in basic</p>	3

Course Code	Course Information	Credits
	construction and surface application techniques. Projects focus on development of form and surface in ceramics, as well as exposure to historical and contemporary issues specific to the medium. Additional Fee(s): Applied art fee.	
ART114	<p>DESIGN STUDIO</p> <p>This course is an introduction to the visual grammar of dynamic composition and form. In this studio course the student will study design with an emphasis on gaining an understanding of organizing principles that contribute to visual engaging and visual arrangements.</p>	3
ART115	<p>PAINTING I</p> <p>This course introduces the student to basic principles of painting and two-dimensional thinking and expression. Drawing skills, color theory, stretcher construction, and a general understanding of visual art concepts accompany each assignment. Additional Fee(s): Applied art fee.</p>	3
ART117	<p>DRAWING I</p> <p>Through various drawing media, this studio course explores the basic principles of creating a work of visual art, including figure studies from the model, studies from nature, and techniques of composition. Additional Fee(s): Applied art fee.</p>	3
ART127	<p>PRINTMAKING I</p> <p>This course is an introduction to the techniques and aesthetics of graphic media, including dry point, engraving, mezzotint, etching, and aquatint. Additional Fee(s): Applied art fee.</p>	3
ART129	<p>THE BODY: SELF/OTHER IN THREE PARTS</p> <p>The Body: Self/Other in Three Parts</p>	3

Course Code	Course Information	Credits
ART131	HISTORY OF WORLD ART I: PREHISTORY TO 1400	3
	<p>This introductory survey focuses on art of the ancient world and the Middle Ages in the West and selected non-Western cultures to 1400 including India, China, and Mesoamerica. It emphasizes the role of art in the formation of a culture, the shifting function of art in different societies and time periods, and the approaches students can use to understand art.</p>	
ART132	HISTORY OF WORLD ART II: 1400 TO PRESENT	3
	<p>This introductory survey focuses on Western art from the Renaissance to today and the art of selected non-Western cultures (including Japan, Africa, and Islamic countries) after 1400. It concentrates on the stylistic, technical, and expressive evolution of painting, architecture, and sculpture within specific historical contexts, yet also explores the cross-influences and interaction of non-Western and Western art as defining characteristics of the modern world.</p>	
ART141	MEDIA LITERACY	3
	<p>This course introduces students to computer graphic systems and related media practices. Students explore digital foundations, media-related histories, theoretical frameworks, and critical examination of production elements as they discover how digital practices are continuously changing the way imagemakers create and present their work. Additional Fee(s): Applied laboratory fee.</p>	
ART142	PHOTOGRAPHY I : BLACK AND WHITE DARKROOM	3
	<p>This course introduces students to black and white darkroom photography. Students build camera skills while investigating 35mm film fundamentals and wet lab methods. A range of photographic materials and analog techniques are covered. Students study the photograph as a medium for documentation,</p>	

Course Code	Course Information	Credits
	representation, and expression. Additional Fee(s): Applied laboratory fee.	
ART152	PHOTOGRAPHY II - INTRODUCTION TO DIGITAL PHOTOGRAPHY This course introduces students to the basic aesthetic grammar of digital photography and provides a historical and critical context for looking at and making photographs. Students use cameras with manually adjustable focus and exposure control. Digital darkroom techniques will be explored in Lightroom and Photoshop. Additional Fee(s): Applied laboratory fee.	3
ART205	SCULPTURE STUDIO This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.	3
ART208	INTRODUCTION TO ART MUSEUM STUDIES This course introduces students to the themes and issues addressed in the Art Museum Studies program, including an overview of the history and function of art museums, their role in society, the interpretation of objects for museum audiences, and other issues central to the museum profession such as censorship and repatriation.	3
ART210	HISTORY OF PHOTOGRAPHY This course will examine the relationships between photographs and audiences from the early nineteenth century to the present. A variety of themes will be discussed, including fashion photography, war, fine arts, advertising, portraits, landscapes, and social documentary. Within this structure, we will consider fundamental questions about photography, vision, and meaning,	3

Course Code	Course Information	Credits
	such as finding truth in images and discovering the relationship between image-making and power.	
ART211	<p>CERAMICS STUDIO</p> <p>This studio course advances the student in all technical aspects of ceramics and explores conceptual, critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART111 : Ceramics I 	3
ART213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
ART214	<p>DESIGN STUDIO</p> <p>This course is an introduction to the visual grammar of dynamic composition and form. In this studio course the student will study design with an emphasis on gaining an understanding of organizing principles that contribute to visual engaging and visual arrangements.</p>	3
ART215	<p>PAINTING STUDIO</p> <p>This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART115 : Painting I 	3
ART217	<p>DRAWING STUDIO</p>	3

Course Code	Course Information	Credits
ART220	<p>This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ART117 : Drawing I <p>MATERIAL STUDIES STUDIO</p> <p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p>	3
ART225	<p>This class is an introduction to the concrete and conceptual aspects of typography as a visual medium. Technique and the abstract compositional uses for typography will be examined. Historic and contemporary forms of alphabetic communications will be explored, along with image-based communication through applied projects. Additional Fee(s): Applied laboratory fee.</p> <p>TYPOGRAPHY DESIGN STUDIO</p>	3
ART227	<p>This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced,</p> <p>PRINTMAKING STUDIO</p>	3

Course Code	Course Information	Credits
	<p>discussed, and critiqued. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART127 : Printmaking I 	
ART230W	<p>WOMEN AND ART</p> <p>Women and Art addresses the work of women artists from the Renaissance to the present and images of women in Western art. Feminist approaches to the history of art are examined critically to determine their contribution to the history of art. This is a writing intensive course.</p>	3
ART231	<p>RENAISSANCE ART</p> <p>This course traces the rise of the humanistic spirit in the art of Italy between 1300 and 1550. Equal emphasis is placed on the achievements of Early Renaissance artists and architects (Ghiberti, Alberti, Donatello, Masaccio, Botticelli), and the masters of the High Renaissance (Leonardo, Raphael, Michelangelo, Bramante, Titian).</p>	3
ART234	<p>BAROQUE AND ROCOCO ART</p> <p>An in-depth survey of the various styles and aims of European art from 1590 to 1700.</p>	3
ART241	<p>LIGHTING PRINCIPLES</p> <p>This course gives a basic grounding in lighting techniques for both studio and location work and covers the use of available light and various lighting instruments. Students create lighting plans; learn to create dramatic high-key effects of subtly sensitive illumination, and master color balance and metering. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • ART273 : Photography I • COM273 : Photography I - B&W Darkroom 	
ART245	<p>DESIGN PRAXIS</p> <p>This course introduces the concepts of visual perception and the relevance of symbols and archetypes in expanding cognitive and perceptual skills. The course will broaden and deepen student's visual and verbal skills in critical thinking, the creative process and problem solving through applied branding identities. Additional Fee(s): Applied laboratory fee.</p>	3
ART247	<p>PHOTOGRAPHY III - ADVANCED DIGITAL IMAGING</p> <p>This course introduces students to the creation, enhancement, and manipulation of high-quality digital imagery. Adobe Photoshop is the primary tool, and students learn fundamentals of the interface, resolution, masking, layering, compositing, color correction and retouching. Emphasis is on artistry as well as developing technical skills. Additional Fee(s): Applied laboratory fee.</p>	3
ART248	<p>19TH-CENTURY ART</p> <p>This survey examines art movements in France, England, Germany, and other European countries from the early to late 19th-century, focusing on Romanticism and Realism, the Pre-Raphaelites, Impressionism and Post-Impressionism, and Symbolism. It explores the impact of urbanization, industrialization, and race and gender issues on visual culture.</p>	3
ART254	<p>MODERN ART, 1900 TO THE PRESENT</p> <p>In this course the student will be introduced to the major movements in European and American art since 1900. The first half will focus on 1900 to 1950 and the concept of modernism, who and what shaped it, and the shifting definitions of the artist. The second half will focus on recent trends in world art,</p>	3

Course Code	Course Information	Credits
	focusing on new media and movements, including installation art, earth art, video art, postmodernism, and the new theoretical and conceptual approaches to art and art history.	
ART261	WEB DESIGN 1: CODE + AESTHETICS <p>This course introduces students to web design software and basic code and programming languages. Students will develop technical, aesthetic, and conceptual skills by participating in lectures, demonstrations, computer labs, and critiques, as well as participating in critical analysis of various sites and Internet strategies. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FDT210 : Studio: Adobe Illustrator • FDT220 : Studio: Adobe Photoshop 	3
ART271	ASIAN ART <p>This course surveys the art of India, China, Southeast Asia, Korea, and Japan from the earliest civilizations to the modern period. Since much Asian artistic production was inspired by religious belief, students also will be introduced to the major currents of Asian religion and philosophy, including Buddhism, Hinduism, Jainism, Islam, Confucianism, Daoism, and Shintoism.</p>	3
ART305	SCULPTURE STUDIO <p>This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ART205 : Sculpture Studio 	3

Course Code	Course Information	Credits
ART309W	ART + LAND: ARTISTS ENGAGE THE ENVIRONMENT	3
	<p>This course explores interactions between visual artists and the natural environment. It examines 15th- to 17th-century landscape painting and the role of landscape and national identity in the 19th century. It also explores the Earth Art movement that began in the 1960s and current investigations of art and sustainability.</p>	
ART311	CERAMICS STUDIO	3
	<p>This studio course advances the student in all technical aspects of ceramics and explores conceptual and critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART211 : Ceramics Studio 	
ART313	SPECIAL TOPICS	3
	Special Topics	
ART315	PAINTING STUDIO	3
	<p>This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART115 : Painting I 	
ART317	DRAWING STUDIO	3
	<p>This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing.</p>	

Course Code	Course Information	Credits
	<p>Conceptual and critical approaches to the medium are emphasized. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART117 : Drawing I 	
ART320	<p>MATERIAL STUDIES STUDIO</p> <p>Students continue to develop their understanding of three-dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART220 : Material Studies Studio 	3
ART327	<p>PRINTMAKING STUDIO</p> <p>This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART127 : Printmaking I 	3
ART328	<p>THE CARNEGIE INTERNATIONAL</p> <p>This course will analyze contemporary art of the past 4-5 years as organized by the curators of the Carnegie International. It will examine the history of the International and other exhibitions of</p>	3

Course Code	Course Information	Credits
	<p>this type, the globalized art market, and current media techniques and broader concerns of visual artists working today.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ART132 : History of World Art II: 1400 to Present • ART254 : Modern Art, 1900 to the Present 	
ART353	<p>PRINT DESIGN</p> <p>This course combines technical training in digital imaging with exercises in creative print-based media design and critical thinking. Students learn advanced design principals, typography, image placement and structure. Students work with a range of digital tools, including Adobe InDesign, Photoshop and Illustrator. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ART225 : Typography Design Studio • ART245 : Design Praxis 	3
ART365	<p>VISUAL COMMUNICATION</p> <p>This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and community.</p>	3
ART366	<p>AMERICAN ART: COLONIAL TO 1900</p> <p>This course examines the major movements, artists, and cultural issues of American painting, sculpture, and photography from its beginnings to 1900. Special attention is given to works that address definitions of American "identity" and cultural</p>	3

Course Code	Course Information	Credits
	<p>interaction and conflict between races.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ART131 : History of World Art I: Prehistory to 1400 • ART132 : History of World Art II: 1400 to Present 	
ART368	<p>MUSEUM EDUCATION AND THE VISUAL ARTS</p> <p>This course traces the development of the American art museum's educational mission from the early nineteenth century to the present. A range of programming types, including docent touring, computer-based learning, museum-school partnerships, and hands-on experiences are observed and analyzed. Students will also design programs for exhibitions in the Chatham University Art Gallery.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART208 : Introduction to Art Museum Studies 	3
ART370	<p>DIGITAL ILLUSTRATION METHODS</p> <p>This course will concentrate on the concept and originality of ideas in digital illustration and will also explore vector and raster-based applications to be used as tools to create digital illustrations. Illustrations created in this course will be applied to design formats and page layouts.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART117 : Drawing I 	3
ART372	<p>CURATING AFRICAN ART AND ARTIFACTS</p> <p>This course explores the rich diversity of art across sub-Saharan Africa from the Paleolithic era to today. It focuses on cultures from West Africa, Central Africa, and East Africa to complement the holdings of the College's outstanding Olkes Collection of African Art, which includes more than 600 objects. Class lecture, discussion, and student projects utilize works from the</p>	3

Course Code	Course Information	Credits
	collection, including masks, wood sculpture, beadwork, and metalwork.	
ART378	<p>CURATING THE VISUAL ARTS</p> <p>This course explores the roles and duties of the art museum curator. Topics addressed include collection care and management, exhibition planning and design, object handling, and exhibition critiques. Curators from local museums will serve as guest speakers. Students will collaboratively curate at least one exhibition.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• ART208 : Introduction to Art Museum Studies 	3
ART388	<p>LANDSCAPE PHOTOGRAPHY</p> <p>The landscape is fascinating from a natural and contrived point of view. This course explores the art of taking landscape shots digitally with emphasis on composition, focal points, color, light, movement, time of day, framing, and weather conditions. You will explore a range of image capturing from macro flower shots to vast panoramic points of view from urban and rural subject matter. Several new digital image editing processes will be taught using Photoshop. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• ART152 : Photography II - Introduction to Digital Photography <li>• FDT150 : Introduction to Digital Video Production 	3
ART405	<p>SCULPTURE STUDIO</p> <p>This advanced studio course gives the student the opportunity to study a particular process or combination of processes in more depth. Contemporary approaches such as installation and performance art, and environmental and conceptual art are introduced. Additional Fee(s): Applied art fee.</p>	3

Course Code	Course Information	Credits
ART411	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART305 : Sculpture Studio <p>CERAMICS STUDIO</p> <p>This studio course advances the student in all technical aspects of ceramics and explores conceptual, critical approaches both to the medium and to specific contemporary issues. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART311 : Ceramics Studio 	3
ART415	<p>PAINTING STUDIO</p> <p>This advanced course in painting gives the student a broad understanding of technical issues in the context of contemporary conceptual and critical approaches to the medium. Students will have an opportunity to work on independent projects. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART315 : Painting Studio 	3
ART417	<p>DRAWING STUDIO</p> <p>This advanced studio course continues figure studies from the model, as well as landscape drawing and architectural drawing. Conceptual and critical approaches to the medium are emphasized.. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ART117 : Drawing I 	3
ART420	<p>MATERIAL STUDIES STUDIO</p> <p>Students continue to develop their understanding of three-</p>	3

Course Code	Course Information	Credits
ART427	<p>dimensional materials and processes, their history and practice, and associated conceptual vocabularies in this studio. The course aims to challenge students with ceramic and/or sculptural skills in order to move beyond technique, and reconsider material and process from a variety of perspectives. Studio and research assignments will examine technical and conceptual concerns - prompting students to articulate and contextualize their artistic practice.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ART320 : Material Studies Studio 	3
ART483	<p>This course further explores the conceptual and technical potential of printmaking through a variety of processes and projects, including, but not limited to: aquatint, etching, mezzotint, monoprint, woodcut and experimental practice. Historical and contemporary practices are introduced, discussed, and critiqued. Additional Fee(s): Applied art fee.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ART127 : Printmaking I 	3
ART489	<p>In this practicum, students gain experience in studio-based and field photography. Students develop a portfolio of portrait and event photography with the potential to be used for the Communique, college publications, and other outlets, with name credits on all published work. Additional Fee(s): Applied laboratory fee.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ART142 : Photography I : Black and White Darkroom • ART152 : Photography II - Introduction to Digital Photography 	3

Course Code	Course Information	Credits
ART490	INTEGRATIVE CAPSTONE	3
ART492	INDEPENDENT STUDY	2

This course provides essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Using advanced tools in Adobe InDesign and other applications, students create portfolios in print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered.

Pre-Requisites:

Complete all 2 of the following courses:

- ART245 : Design Praxis
- ART321 : Typography Design Studio

The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.

Pre-Requisites:

Complete the following course:

- FDT300W : Critical Theory

The designed environment influences and is influenced by human activity patterns and behavior. This course is an introduction to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
ART493	<p>INDEPENDENT STUDY</p> <p>This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. Students are introduced to a number of techniques and methods of drawing used by interior designers, including freehand drawing, use of colored pencils, markers, and mechanical drafting through various exercises. An understanding is developed of architectural scale, plans, elevations, and sections. Additional work is spent on values, colors, palettes, and shadowing techniques that culminate in a final project. Cross-listed as IAR 510.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
ART498	<p>TUTORIAL: ART</p> <p>Tutorial: Art</p>	4
ART499	<p>TUTORIAL: ART</p> <p>Tutorial: Art</p>	4
ATH500	<p>PREVENTION AND CARE OF EMERGENCY MEDICAL CONDITIONS</p> <p>This course will teach athletic training students recognition, evaluation, and treatment of emergent medical conditions. This will include basic skills required for injury prevention, treatment and recovery as it relates to physically active populations.</p>	3
ATH501	<p>THERAPEUTIC MODALITIES</p>	4

Course Code	Course Information	Credits
	<p>This course educates and expands on theories and application of therapeutic modalities utilized in athletic training. Focus includes clinical decision making and evidence based utilization of modalities in pain modulation and treatment of acute and chronic conditions.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • ATH500 : Prevention and Care of Emergency Medical Conditions 	
ATH502	<p>INTRODUCTION TO PROFESSIONAL PRACTICE</p> <p>This course will introduce athletic training students to various aspects of professional practice as it relates to athletic training including historical aspects of the profession, ethics, documentation and collaboration with other healthcare professions to optimize patient outcomes.</p>	2
ATH503	<p>ORTHOPEDIC AND NEUROLOGIC ASSESSMENT I</p> <p>This course teaches athletic training students a systematic evaluative process including techniques involved in the assessment of orthopedic and neurological conditions of the lower extremity, pelvis, and lumbar spine.</p>	4
ATH504	<p>ORTHOPEDIC AND NEUROLOGIC ASSESSMENT II</p> <p>This course teaches athletic training students a systematic evaluative process including techniques involved in the assessment of orthopedic and neurological conditions of the upper extremity, torso, head, thoracic, and cervical spine.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ATH503 : Orthopedic and Neurologic Assessment I 	4
ATH505	<p>MEDICAL MANAGEMENT OF AN ATHLETIC POPULATION</p> <p>This course teaches recognition, evaluation, management, and</p>	3

Course Code	Course Information	Credits
ATH506	<p>treatment of non-orthopedic medical conditions that affect physically active populations.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ATH503 : Orthopedic and Neurologic Assessment I 	4
ATH507	<p>Theories, concepts and psychomotor skills in the appropriate application and utilization of therapeutic exercise in the rehabilitation of musculoskeletal injuries.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ATH503 : Orthopedic and Neurologic Assessment I 	4
ATH508	<p>Students acquire a scientific and physiological rationale, selection criteria, indications and contraindications of exercise, and return to activity guidelines. Techniques and skills provided in both classroom and lab experiences will address range of motion, strengthening, proprioception, cardiovascular fitness, joint-specific and sport specific protocols.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ATH506 : Therapeutic Interventions I 	2
ATH508	<p>PHARMACOLOGY IN ATHLETIC TRAINING</p> <p>The purpose of this course is to provide an overview of drugs commonly used to treat patients seen by persons working in health science professions. Medical reasons for drug treatment, pharmacokinetics and pharmacodynamics of various medications, and adverse effects are presented. Specifically emphasized are drugs affecting the musculoskeletal, cardiovascular, nervous, endocrine, and gastrointestinal systems.</p> <p>Pre-Requisites:</p>	2

Course Code	Course Information	Credits
	<p>Complete the following course:</p> <ul style="list-style-type: none"> • ATH505 : Medical Management of an Athletic Population 	
ATH509	<p>RESEARCH SEMINAR I</p> <p>This course will introduce the fundamentals of research design and interpretation, including basic statistical analysis. Students will identify, locate and appraise current literature related to athletic training and determine how it applies to clinical practice.</p>	1
ATH510	<p>RESEARCH SEMINAR II</p> <p>This course will introduce the fundamentals of qualitative research design and other topics including disablement models, clinical prediction rules, patient oriented outcomes. Students will gain an understanding of qualitative research and its applicability in the Athletic Training profession.</p>	1
ATH511	<p>RESEARCH SEMINAR III</p> <p>This course will promote student analysis and summary of quantitative research as it relates to athletic training. Students will develop a research question, search literature, summarize and make evidence based clinical recommendations stemming from their research.</p>	1
ATH512	<p>CLINICAL EXPERIENCE IN ATHLETIC TRAINING I</p> <p>This course is designed to allow students to review and demonstrate lower extremity and lumbar spine injury evaluations, foundational athletic training skills, modality implementation and emergency management techniques through the completion of a 12-week clinical education experience of approximately 240 clinical hours.</p>	3
ATH513	<p>CLINICAL EXPERIENCE IN ATHLETIC TRAINING II</p> <p>This course is designed to allow students to develop clinical</p>	3

Course Code	Course Information	Credits
	proficiency in the evaluation, diagnosis, and treatment of upper extremity dysfunction, demonstrate therapeutic exercise and modality applications through the completion of a 15-week clinical education experience of approximately 240 hours.	
ATH514	<p>CLINICAL EXPERIENCE IN ATHLETIC TRAINING III</p> <p>This course is designed expose students to common non-orthopedic medical conditions present in physically active patients across the lifespan. Students will complete experiences collaborating with other health care providers in local primary or urgent care clinics through the completion of an 8- week clinical education experience approximately 160 hours.</p>	2
ATH515	<p>CLINICAL EXPERIENCE IN ATHLETIC TRAINING IV</p> <p>This course is designed develop and enhance the practical skills and knowledge necessary for clinical practice, develop student clinical proficiency in all areas of the athletic training profession and facilitate increasing levels of autonomous practice through completion of a student selected 10-week fully immersive clinical education experience approximately 320 hours.</p>	4
ATH516	<p>CLINICAL EXPERIENCE IN ATHLETIC TRAINING V</p> <p>This course is designed to develop and enhance the practical skills and knowledge necessary for clinical practice, develop student clinical proficiency in all areas of the athletic training profession and facilitate increasing levels of autonomous practice through completion of a student selected 10-week immersive clinical education experience approximately 240 hours.</p>	3
ATH517	<p>ADMINISTRATION AND MANAGEMENT</p> <p>This course will address administration responsibilities, policies,</p>	3

Course Code	Course Information	Credits
	and procedures as they relate to the athletic training profession. Focus will be placed on legal and ethical practices, budget, record keeping, facility design and budget as well as job seeking, and interview skills.	
ATH518	OPTIMIZING ATHLETIC PERFORMANCE This course explores the concepts of assessing, designing, and implementing specialized performance programs to address the health and performance goals of the athletes. The primary focus is on movement instruction, nutrition, energy systems, program design and concepts of strength and conditioning.	3
ATH519	ADVANCED TOPICS IN ATHLETIC TRAINING This course provides students the opportunity to examine advanced issues that shape the athletic training profession through practical application and professional development. Emphasis is placed on surgical techniques, radiological concepts and interpretation, laboratory reports, interpreting imaging, and lifespan issues and advanced treatment procedures used in diverse settings.	3
ATH520	CERTIFICATION PREPARATION COURSE This course is designed to prepare students for the Board of Certification Examination and for becoming licensed to practice as an athletic trainer. Through the use of self-assessments, students will identify areas of strengths and weaknesses, create tailored study plans, and complete practice examinations.	1
ATH521	ADVANCED SPORTS NUTRITION This course discusses scientifically founded sports nutrition including macro nutrients, energy expenditure in sport and exercise, dietary requirements pre-activity, during and post activity, ergogenic aids and nutritional supplements in a variety of active populations. Various diets and their implications/impact	3

Course Code	Course Information	Credits
	on the body will also be discussed.	
ATH522	<p>HEALTHCARE DELIVERY</p> <p>This course will discuss the historic development, organization and characteristics of health care delivery systems, payment and reimbursement systems, accrediting agencies applicable to athletic training, organizational patterns of health care facilities, medical staff organization and bylaws; and the athletic training profession from its initiation to the present and future.</p>	3
BIO114	<p>BASIC NUTRITION</p> <p>This course is an overview of scientific principles of nutrition and their application to humans throughout the life cycle. It is designed for students who need a broad coverage of nutrition and have little or no background in science. Enrollment in a school of nursing is required.</p>	3
BIO115	<p>BASIC MICROBIOLOGY WITH LAB</p> <p>This course is designed for students who need a broad coverage of microbiology and have little or no background in biology or chemistry. It includes a study of microscopic organisms and their relation to health and disease. There is a special emphasis on disinfection, sterilization, immunology, and microbiological aspects of infectious disease. Three hours of lecture and two hours of lab per week. Enrollment in a school of nursing is required.</p>	4
BIO116	<p>BASIC ANATOMY AND PHYSIOLOGY I WITH LAB</p> <p>This is the first of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be</p>	4

Course Code	Course Information	Credits
	considered. Three hours of lecture and two hours of lab per week. Enrollment in a school of nursing is required.	
BIO117	<p>BASIC ANATOMY AND PHYSIOLOGY II WITH LAB</p> <p>This is the second of two courses designed for students who need a broad coverage of anatomy and physiology and have little or no background in science. It includes a study of the structure and function of human cells, tissue, organs, and systems. Clinical applications of anatomy and physiology will also be considered. Three hours of lecture and two hours of lab per week.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab 	4
BIO118	<p>ENVIRONMENTAL HEALTH ISSUES</p> <p>This course addresses the connection between health and the environment. Topics include; the areas of environmental epidemiology, toxicology, and policy, agents of environmental disease, and water, air, and soil quality. The work of scientists and public health specialists to discover, assess, and reduce exposure and risk to environment health problems are also explored. Case studies are used to provide context and background for the environmental health issues past and present.</p>	3
BIO119	<p>MEDICAL TERMINOLOGY</p> <p>This course is designed for students who need a broad coverage of medical terminology and who have little or no background. It includes studies of etymology and human anatomy. There is a special emphasis on clinical applications. Three hours of lecture including media presentations per week.</p>	3
BIO123	NUTRITION	3

Course Code	Course Information	Credits
	An introduction to nutrients, their composition, functions, and sources. Human physiology, including digestion, metabolism, and excretion, is covered, along with special nutritional needs throughout the life cycle. Integrated with this basic information are special topics pertaining to diets, organic foods, preservatives, pesticides, world hunger, and other current concerns.	
BIO131	HUMAN GENETICS This course is designed to help students understand issues in genetic research and biotechnology. Topics include Mendelian genetics, DNA structure and testing, pedigrees, birth defects, cancer, and the creation of transgenic plants and animals. Three hours of lecture per week.	3
BIO135	APPLIED HUMAN BIOLOGY This course is designed to introduce non-science majors to major aspects of human biology. The course will be taught as a series of modules covering the basic biology of various human systems followed by applications that are appropriate to the needs of students.	3
BIO135L	APPLIED HUMAN BIOLOGY LAB Laboratory course emphasizing aspects of human biology. Experiments will correlate with and enhance lectures in BIO 135.	1
BIO143	THE CELL This course is designed to provide a broad overview of current biological concepts, including cell structure, function, division, and basic genetics. Biologically important molecules also are presented. This course serves as the foundation for all upper-level biology courses. Three hours of class	3

Course Code	Course Information	Credits
BIO143L	<p>LAB: THE CELL</p> <p>Experiments to complement the material presented in BIO143. Two hours of laboratory per week. Corequisite or Prerequisite: BIO143. Additional Fee(s): Laboratory fee.</p>	1
BIO144	<p>THE ORGANISM</p> <p>This course provides a general survey of animals and plants at the organismic level, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as the foundation for all upper-level biology courses. Three hours of class.</p>	3
BIO144L	<p>LAB: THE ORGANISM</p> <p>Experiments to complement the material presented in BIO144. Two hours of laboratory per week. Corequisite: BIO144. Additional Fee(s): Laboratory fees.</p>	1
BIO201	<p>ANATOMY</p> <p>This course introduces students to the basic concepts of anatomy. Lectures emphasize the human body and clinical applications of anatomy. They focus on anatomical terminology, gross structures, body movements, forming a three-dimensional mental image of body parts, and functional understanding of normal structures. Three hours of class per week.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	3
BIO201L	<p>LAB: ANATOMY</p> <p>Laboratory experiments emphasizing comparative anatomy</p>	2

Course Code	Course Information	Credits
	<p>between humans and other animals. Three hours of laboratory per week. Corequisite: BIO201. Additional Fee(s): Laboratory fees.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	
BIO205	<p>HUMAN CADAVER DISSECTION</p> <p>Students in this course will dissect a human subject, learning techniques with scalpels and scissors to separate and prepare the gross anatomy for study. This is an experiential lab course with teaching by example and supervision. A core part of this experience is learning professionalism in dealing with subjects, as well as lab safety and human remain protocols.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 : Anatomy <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BIO201L : Lab: Anatomy • BIO201LW : Lab: Anatomy 	3
BIO209	<p>BASIC NEUROSCIENCE</p> <p>This course is designed for wide appeal. It is an introduction to structure and function of the brain and spinal cord, and how nerves function and communicate. The basics of movement, sensation, language, emotion, and consciousness are discussed. Emphasis is placed on contrasting normal function with altered function in diseases. Three hours lecture per week.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism • CHM108 : Chemistry II 	3
BIO209LW	<p>BASIC NEUROSCIENCE LAB</p>	2

Course Code	Course Information	Credits
	Experiments and skills to compliment the material presented in BIO209. The lab course focuses on experimental procedures, scientific analysis and scientific writing. Three hours of laboratory per week. Laboratory Fee. Corequisite: BIO 209.	
BIO213	SPECIAL TOPICS: WOMEN'S HEALTH ISSUES	3
BIO217	<p>HUMAN GENETICS</p> <p>This course covers the underlying basis of genetic disorders. A foundation of basic genetic concepts such as Mendelian genetics and exceptions to Mendel's laws, chromosomal inheritance, and molecular genetics are taught and applied to the following advanced topics: epigenetics, medical genetics, cancer, biotechnology, population genetics, and evolutionary genetics.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	3
BIO218	<p>WOMEN'S HEALTH ISSUES</p> <p>This course examines the biology of women, both cis gender and people within trans communities, providing a framework for the discussion of health issues, current research, treatments, and historical perspectives. Aspects of reproductive life and an examination of psychological, sociological and cultural influence.</p>	3
BIO221	<p>GENERAL MICROBIOLOGY</p> <p>The study of fundamental characteristics of bacteria and related microorganisms, including taxonomy, physiology, and distribution. Three class meetings per week.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	<p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism • CHM108 : Chemistry II 	
BIO221L	<p>LAB: GENERAL MICROBIOLOGY</p> <p>Experiments to complement the material in BIO221. Four hours of laboratory per week. Corequisite: BIO221. Additional Fee(s): Laboratory fees.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO221 : General Microbiology 	2
BIO221LW	<p>LAB: GENERAL MICROBIOLOGY</p> <p>Experiments to complement the material in BIO221. Four hours of laboratory per week. Additional Fee(s): Laboratory fees.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO221 : General Microbiology • BIO303 : Applied and Environmental Microbiology 	2
BIO224	<p>BOTANY</p> <p>An introduction to the structure and function of plants. Topics include the evolutionary rise of green plants, plant life cycles and development, plant physiology, plant ecology, and the morphology and taxonomy of vascular plants. The importance of plants for humans is discussed, including their use for food and medicine. Three hours of lecture per week.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	3
BIO224L	<p>LAB: BOTANY</p> <p>Experiments to complement the material presented in BIO224. Four hours of laboratory or field experience per week. Corequisite: BIO224. Additional Fee(s): Laboratory fees.</p>	2

Course Code	Course Information	Credits
	<p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO224 : Botany 	
BIO226	<p>TOXICOLOGY</p> <p>An introduction to toxic substances, their classification, entry into living systems, modes of action, and fate. Various living systems are considered, from the subcellular to the ecosystem level. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism • CHM109L : Chemistry I Laboratory • CHM110L : Chemistry II Laboratory 	3
BIO231	<p>CELL AND MOLECULAR BIOLOGY</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • CHM108 : Chemistry II 	3
BIO231W	<p>CELL AND MOLECULAR BIOLOGY</p> <p>A lecture course covering the organelles and activities of cells. Topics include the structure of proteins and other biomolecules, bioenergetics and enzymes, membranes, the mitochondrion, the chloroplast, the endo-membrane system, the cytoskeleton, and the nucleus and cellular reproduction.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • BIO144 : The Organism • CHM108 : Chemistry II 	
BIO248	<p>ECOLOGY</p> <p>A study of the interrelation between organisms and their environment. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 : Integrative Biology 	3
BIO248LW	<p>LAB: ECOLOGY</p> <p>Experiments to complement the material presented in BIO248. Four hours of laboratory or field experience per week. Corequisite: BIO248. Additional Fee (s): Laboratory fee.</p>	2
BIO255	<p>BIOMEDICAL ETHICS</p> <p>This course examines moral dilemmas created or intensified by recent advances in medical technology. Examples of topics include euthanasia and the right to die, abortion, behavior modification, allocation of scarce medical resources, in vitro fertilization, genetic screening and engineering, and human experimentation.</p>	3
BIO302	<p>PHYSIOLOGY</p> <p>This course introduces students to the basic concepts of physiology. The lectures will emphasize chemical principles, cellular biological principles, and a survey of the nervous, endocrine, immune, musculoskeletal, cardiovascular, excretory, respiratory, and digestive systems. The laboratory will emphasize comparative physiology between humans and other animals. Three hours of class per week.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 : Anatomy 	
BIO302L	<p>PHYSIOLOGY LAB</p> <p>Laboratory experiments emphasizing comparative physiology between human and other animals. Three hours of laboratory per week. Corequisite: BIO302. Additional Fee(s): Laboratory fees.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO201L : Lab: Anatomy 	2
BIO303	<p>APPLIED AND ENVIRONMENTAL MICROBIOLOGY</p> <p>This course will focus on the importance of microorganisms in environmental and industrial processes, and the role of scientific research in finding solutions to applied problems. Areas that will be covered include basic microbiology, soil and water microbiology, agricultural and food microbiology, and public health microbiology.</p>	3
BIO303LW	<p>APPLIED AND ENVIRONMENTAL MICROBIOLOGY LAB</p> <p>This course will focus on modern laboratory techniques for the identification, purification, and cultivation of microorganisms at the bench; combined with microbial genomics and applied bioinformatic analyses through participation in authentic scientific research.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO303 : Applied and Environmental Microbiology 	2
BIO319	<p>EXPERIMENTAL NEUROSCIENCE</p> <p>With an emphasis on neuropathology, the course builds on the foundations of neuroscience to explore advanced topics in sensation, motor control. emotion, and cognition. Classical and</p>	3

Course Code	Course Information	Credits
	<p>modern methods for investigating the structure and function of the nervous system will be examined through lectures, discussions, and student projects.</p> <p>Pre-Requisites: Complete the following course: • BIO209 : Basic Neuroscience Complete any 1 of the following 2 courses: • BIO231 : Cell and Molecular Biology • BIO231W : Cell and Molecular Biology</p>	
BIO408	<p>DEVELOPMENTAL BIOLOGY</p> <p>A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses: • BIO231 : Cell and Molecular Biology • BIO231W : Cell and Molecular Biology</p>	3
BIO417	<p>GENETICS</p> <p>This study of the modern concepts of the gene stresses theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete all 3 of the following courses: • BIO231W : Cell and Molecular Biology • CHM205 : Organic Chemistry I • MTH110 : Elementary Statistics</p>	3
BIO418	<p>CHEMICAL ANALYSIS LABORATORY</p> <p>This laboratory teaches the proper design, implementation and</p>	3

Course Code	Course Information	Credits
	<p>analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM216L : Organic Chemistry Laboratory 	
BIO419	<p>IMMUNOLOGY</p> <p>This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week. Prerequisite(s): BIO221 or BIO302</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO221 : General Microbiology 	3
BIO440L	<p>MACROMOLECULE LABORATORY</p> <p>An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as CHM340.</p>	2
BIO440LW	<p>MACROMOLECULE LABORATORY</p> <p>An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields</p>	2

Course Code	Course Information	Credits
	<p>of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as CHM340. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • BIO231 : Cell and Molecular Biology • BIO231W : Cell and Molecular Biology • BIO438 : Biochemistry I 	
BIO455	<p>BIOMEDICAL ETHICS</p> <p>This course examines moral dilemmas created or intensified by recent advances in medical technology. Examples of topics include euthanasia and the right to die, abortion, behavior modification, allocation of scarce medical resources, in vitro fertilization, genetic screening and engineering, and human experimentation. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • BIO302 : Physiology • BIO408 : Developmental Biology • BIO417 : Genetics 	3
BIO458	<p>HISTOLOGY</p> <p>A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from text book, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO201 : Anatomy 	3
BIO461	<p>AQUATIC ENTOMOLOGY</p>	3

Course Code	Course Information	Credits
BIO461L	<p>Aquatic environments harbor a vast number of insect species that are widely used as biological indicators of environmental health. This course introduces the physiological, ecological, and biomonitoring attributes of aquatic insects and emphasizes taxonomic identification. Preparation for a formal identification certification test from the Society for Freshwater Science is optional.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 : Integrative Biology <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	1
BIO481W	<p>Aquatic environments harbor a vast number of insect species that are widely used as biological indicators of environmental health. This laboratory section complements the course introducing the physiological, ecological, and biomonitoring attributes of aquatic insects. Laboratory assignments will emphasize taxonomic identification and sampling techniques.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS202 : Dynamic Earth Systems 	2
BIO481W	<p>ECOLOGY AND ENVIRONMENTAL JOURNAL CLUB</p> <p>Presentations and discussions of important research papers from the current literature. One class meeting per week. Co-requisite: BIO 498 or 499 or CHM 498 or 499 or permission of instructor.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO498 : Tutorial: Biology • BIO499 : Tutorial: Biology 	2

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • CHM498 : Tutorial: Chemistry • CHM499 : Tutorial: Chemistry • XXX123 : Permission of Instructor 	
BIO484	<p>PLANT PHYSIOLOGY</p> <p>This course is an introduction to the physiology and biochemistry of plants. Lectures and laboratory exercises cover plant cells, enzymes, transport of water and nutrients, metabolism, defenses against pathogens, gene expression, hormones, and responses to environmental stimuli. Three lectures per week.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BIO224 : Botany • CHM108 : Chemistry II 	3
BIO484L	<p>LAB: PLANT PHYSIOLOGY</p> <p>Experiments to complement the material presented in BIO384. Four hours of laboratory per week. Corequisite: BIO484. Additional Fee(s): Laboratory fees.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO484 : Plant Physiology 	2
BIO490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IND350W : Scientific Research Methods 	
BIO491	<p>INDEPENDENT STUDY</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
BIO492	<p>INDEPENDENT STUDY</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
BIO493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
BIO494	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	4
BIO498	TUTORIAL: BIOLOGY	4
BIO499	TUTORIAL: BIOLOGY	4
BIO502	<p>HUMAN GROSS ANATOMY</p> <p>An in-depth study of gross human anatomic structure, emphasizing the musculoskeletal and neuromuscular systems</p>	4

Course Code	Course Information	Credits
	through study of head and neck, body wall, and upper and lower extremity structures. Clinical correlates examine normal movement and pathological processes. Four hours of class and three hours of laboratory per week.	
BIO502L	HUMAN GROSS ANATOMY LAB Human Gross Anatomy Lab	2
BIO503	HUMAN ANATOMY This course provides a basic understanding of human anatomy, with an emphasis on the osteology and muscles of the upper and lower limbs, including the back. It uses a combination of systems-based and region-specific instruction. Lectures are complimented by laboratory exercises based upon the A.D.A.M. computer program. Three hours of class and two hours of laboratory per week.	3
BIO503L	LABORATORY: HUMAN ANATOMY Laboratory: Human Anatomy	1
BIO506	PRINCIPLES OF NEUROSCIENCE A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control of movement. Three hours of class per week. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • BIO502 : Human Gross Anatomy • BIO502 : Human Gross Anatomy 	3
BIO506L	LAB: PRINCIPLES OF NEUROSCIENCE Laboratory experience includes the human nervous system	1

Course Code	Course Information	Credits
	<p>material, brain sections, and anatomical models. Two hours of Laboratory per week.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • BIO506 : Principles of Neuroscience 	
BIO508	<p>DEVELOPMENTAL BIOLOGY</p> <p>A study of the embryonic and post-embryonic development of animals, with special emphasis on humans. The morphogenesis, growth and mechanisms of differentiation are stressed. Other topics include cancer, regeneration, cloning, hormones as mediators of development, and developmental genetics.</p>	3
BIO509	<p>FUNDAMENTALS OF NEUROSCIENCE</p> <p>This course is designed to examine the fundamental aspects of nervous system function, emphasizing the bases of excitability, synaptic transmission and neuron target interactions. BIO509 introduces students to the basics of integrative neural function, including sensory, motor, learning, memory, and limbic systems. Three hours of lecture per week.</p>	3
BIO509L	<p>FUNDAMENTALS OF NEUROSCIENCE LAB</p> <p>Laboratory exercises to compliment lectures in BIO509, including study of human nervous system material, brain sections, and anatomical models. Two hours of Laboratory per week.</p>	1
BIO512	<p>ADVANCED HUMAN GROSS ANATOMY</p> <p>An in-depth study of both regional gross human anatomic structures & cellular level tissue. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary & reproductive systems. Regional study of the head/neck, trunk, and upper/lower extremities, is accomplished through human</p>	3

Course Code	Course Information	Credits
	cadaver dissection.	
BIO512L	<p>ADVANCED HUMAN GROSS ANATOMY LAB</p> <p>The laboratory compliment to BIO512, this course uses human cadavers to facilitate a deeper appreciation for regional gross human anatomic structures. The course is clinically oriented with emphasis on the musculoskeletal, neuromuscular, gastrointestinal, cardiopulmonary, urinary and reproductive systems, via regional study of the head/neck, trunk, and upper/lower extremities.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> <li>• BIO512 : Advanced Human Gross Anatomy 	2
BIO513	<p>INTEGRATED SEMINAR IN APPLIED AND ENVIRONMENTAL MICROBIOLOGY</p> <p>This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.</p>	3
BIO514	<p>ADVANCED HUMAN PHYSIOLOGY</p> <p>An in-depth study of the mechanisms of human body function, emphasizing cells, genetic control of protein synthesis, transport across membranes, contraction and excitation of muscles, the physiology of cardiac muscle, and rhythmical excitation of the normal heart.</p>	3
BIO516	<p>ADVANCED NEUROSCIENCE</p> <p>A study of the structure and function of the human central and peripheral nervous system, including vascular components and special senses. The course emphasizes nervous system control</p>	3

Course Code	Course Information	Credits
	of movement. Three hours of class per week.	
BIO516L	<p>ADVANCED NEUROSCIENCE LAB</p> <p>This lab complements the lectures in BIO516, using hands-on laboratory and data collection exercises. It examines nervous system function, emphasizing excitability, synaptic transmission and neuron-target interactions. It also includes a study of integrative neural function in sensory, motor, learning, memory and limbic systems. Two hours of laboratory per week.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> <li>• BIO516 : Advanced Neuroscience 	2
BIO517	<p>GENETICS</p> <p>A study of the modern concepts of the gene. Lectures stress theory and experimental evidence relating to the structure of the gene, heritability of characteristics, and the behavior of genes in populations.</p>	3
BIO518	<p>CHEMICAL ANALYSIS LABORATORY</p> <p>This laboratory teaches the proper design, implementation and analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Additional Fee(s): Laboratory fee.</p>	3
BIO519	<p>IMMUNOLOGY</p> <p>This course covers fundamental principles of immunology with emphasis on molecular and cellular immunology, including antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and the cellular basis for the immune response. Three hours of lecture per week.</p>	3

Course Code	Course Information	Credits
BIO532	<p>BIOSTATISTICS</p> <p>The study and application of biostatistics and probability distributions in biology, for students who already have a working knowledge of statistics and want to understand the place and application of biostatistical methods in science. Topics include hypothesis testing, analysis of variance for one and many variables, and linear and nonlinear regression. Three hours of class per week.</p>	3
BIO538	<p>BIOCHEMISTRY I</p> <p>This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.</p>	3
BIO539	<p>BIOCHEMISTRY II</p> <p>This course offers the structure and function of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are also taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy are also discussed.</p>	3
BIO540L	<p>MACROMOLECULE LABORATORY</p> <p>An advanced laboratory course for junior or senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week.</p>	2

Course Code	Course Information	Credits
BIO552	<p>COMPUTATIONAL DRUG DESIGN</p> <p>Study of computational techniques of importance in contemporary drug design. Topics include molecular docking, ligand binding free energy calculations, de novo drug design, pharmacophore elucidation, quantitative structure-activity relations, and combinatorial library design. Cross-listed as BIO 452 and CHM 452.</p>	3
BIO553	<p>SPECIAL TOPICS IN BIOLOGY</p> <p>Lectures and/or laboratories in selected areas of contemporary biology, with a focus of recent research.</p>	3
BIO555	<p>MEDICAL AND BIO-ETHICS</p> <p>This course will discuss selected topics in medical ethics emphasizing methods of ethical reasoning about moral dilemmas and contributions of philosophical theories and principles to practical problems of medicine. Includes legal aspects of health care decisions.</p>	3
BIO558	<p>HISTOLOGY</p> <p>A microscopic analysis of human and animal tissue and organ function at the cellular level. Material comes from textbook, lecture, images and animations in addition to practical application and identification of histological specimens. Recommended for students planning to apply to professional schools of medicine, veterinary medicine, or dentistry.</p>	3
BIO561	<p>PHARMACOLOGY</p> <p>This course covers the general principles of drug action, including administration, distribution, mechanism, and excretion. Emphasis will be placed on key pharmacological concepts, basic signal transduction pathways and molecular mechanisms. Pharmacology of the nervous, cardiovascular, and endocrine</p>	3

Course Code	Course Information	Credits
	systems as well as the mechanisms of various antimicrobial agents will be considered.	
BIO562	CARDIOMETABOLIC DISEASE	3
	This course is a focused course extending the concepts related to human physiology. It is expected that each student has an advanced knowledge of the physiological systems of the body as well as basic understanding of the pathophysiology related to cardiovascular and metabolic disease.	
BIO601	PROFESSIONAL DEVELOPMENT IN BIOLOGY	1
	This course provides students with an opportunity to receive mentorship or practical training in teaching, research, or other professional activity in biology.	
BIO612L	CADAVER DISSECTION LAB	3
	This course presents an extensive overview of gross human anatomic structure, through cadaver dissection, emphasizing the thoracic and abdominal viscera, as well as the musculoskeletal and neuromuscular systems. Evident pathologies are highlighted when present. Strong emphasis is placed upon the development of excellent dissection skills and practices.	
	<p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO512 : Advanced Human Gross Anatomy • BIO512L : Advanced Human Gross Anatomy Lab 	
BIO630	BIOLOGICAL RESEARCH PRINCIPLES	3
	This course provides students with a foundation in biological research principles, covering ethics, professional development, writing, research design, data analysis, and research proposal development. These are essential scientific components for any	

Course Code	Course Information	Credits
	graduate student in the biological sciences.	
BIO637	<p>INTERNSHIP</p> <p>Internship</p>	1
BIO638	<p>INTERNSHIP</p> <p>Internship</p>	2
BIO639	<p>INTERNSHIP</p> <p>Internship</p>	3
BIO650	<p>RESEARCH PROPOSAL</p> <p>In conjunction with BIO623 Methods of Biological Research, this course provides the tools for writing a valid proposal to do basic or applied research. Students complete a research proposal for approval of scientific inquiry project, as part of their degree requirements. In this course, students will take the steps to clearly outline a research project for BIO693 Independent Study (non-thesis track) or BIO698 Thesis I (thesis track), which requires program approval. This course is taken subsequent to BIO623 Methods of Biological Research.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO630 : Biological Research Principles 	1
BIO691	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
BIO692	<p>INDEPENDENT STUDY</p>	2

Course Code	Course Information	Credits
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
BIO693	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
BIO697	<p>SCIENTIFIC DISSEMINATION</p> <p>This course fulfills a scientific inquiry requirement for the MS Biology program, non-thesis track. Students document and present results from their independent study project, under the guidance of their faculty mentor. The student will complete an independent study report and give a professional public seminar of the study results. Students normally register for this course in the semester following the semester they performed their required independent study project.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO693 : Independent Study 	3
BIO698	<p>BIOLOGY THESIS I</p> <p>Research in an area of biology. This is the first of two courses that result in a thesis approved by a committee of three faculty members.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO650 : Research Proposal 	3
BIO699	<p>BIOLOGY THESIS II</p>	3

Course Code	Course Information	Credits
	<p>Research in an area of biology. This is the second of two courses that result in a thesis approved by a committee of three faculty members.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO698 : Biology Thesis I 	
BIO800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
BUS105	<p>FOUNDATIONS OF BUSINESS</p> <p>This course introduces the theory and practice of business and fosters analytical thinking. Students build a foundation for learning by gaining an understanding of business organizations, their structure and functions, the increasingly dynamic and complex global setting in which they compete, and the fundamentals of sustainable business practices.</p>	3
BUS110	<p>BUSINESS STATISTICS</p> <p>This course introduces essential research tools in business. Topics include descriptive statistics of central tendency and variability and hypotheses testing statistical analysis using correlation, analysis of variance, and regression. Problems use applications from business cases, marketing research, and economic policy.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	3
BUS138	<p>EDEN HALL EXPERIENCES - ECOSYSTEMS: FOOD TO FUN</p> <p>This experiential class uses the Eden Hall Campus and surrounding environment to give students a hands-on understanding of their relationship and dependence on</p>	1

Course Code	Course Information	Credits
	ecosystem services. The class looks at examples of the four ecosystem services - provisioning, regulating, supporting and cultural.	
BUS145	<p>SUSTAINABILITY IN ACTION</p> <p>This course combines classroom instruction with real-world application. Students are familiarized with the latest science concerning environmental degradation, sources of adverse environmental impact and opportunities for making improvements. We will review current theory and practical methods for increasing targeted pro-environmental behaviors (PEB) given the scope of individual, organization, and community-level conditions that may be present.</p>	3
BUS171	<p>INFORMATION SYSTEMS AND OPERATIONS</p> <p>This course explores basic concepts of communication networks (e.g., the Internet), hardware, software, databases, and systems. Students apply information systems to decision making, communication, collaboration and coordination in the operations of contemporary organizations. Students gain skills in word processing, presentation software, data visualization, spreadsheets, and relational databases.</p>	3
BUS213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
BUS217	<p>INTRODUCTION TO PROJECT MANAGEMENT</p> <p>This course covers concepts and techniques of Project Management (PM), given the triple constraint of limited cost, time, and project scope. Students acquire knowledge of generally accepted tools and become familiar with techniques for achieving project success. The coursework prepares the student for the Certified Associated Project Manager (CAPM)</p>	2

Course Code	Course Information	Credits
	examination.	
BUS230	ORGANIZATIONAL BEHAVIOR	3
	<p>This course teaches students to understand, explain, and improve human behavior in organizations. Most organizations focus efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	
BUS230W	ORGANIZATIONAL BEHAVIOR	3
	<p>Organizational behavior is a field of study that seeks to understand, explain, and improve human behavior in organizations. Most organizations focus their efforts on improving job performance and organizational commitment. The purpose of this course is to provide a theoretical foundation and realistic understanding of how human behavior influences the effectiveness of the modern corporation.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	
BUS240	INTERNATIONAL BUSINESS	3
	<p>This course provides the background on the relationships among multinational corporations, international financial markets, and government agencies. Multinational corporations' strategic formulations of product policy research and development, production, and supply systems, as well as financing of international operations, are examined. This course fulfills a global general education mission requirement.</p>	

Course Code	Course Information	Credits
BUS243	<p>PRINCIPLES OF MARKETING</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p>	3
BUS243W	<p>PRINCIPLES OF MARKETING</p> <p>This course introduces students to the basic concepts of marketing strategy and management. Basic marketing concepts such as strategic segmentation, targeting, positioning, product design, pricing, promotions and distribution are covered. Environmental sustainability is analyzed from the consumer perspective.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	3
BUS244	<p>CONSUMER BEHAVIOR</p> <p>The course reviews and evaluates the major theories of consumer behavior from the economics, behavioral sciences, and marketing literatures. The use of consumer research data for marketing decisions is emphasized. Topics include market segmentation, theories of brand choice, family decision making, life cycle theories, and the diffusion of innovations.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS243 : Principles of Marketing • BUS243W : Principles of Marketing 	3
BUS257	<p>BUSINESS LAW AND BUSINESS ETHICS</p> <p>This course introduces students to the introductory concepts of business law including employment law, social and</p>	3

Course Code	Course Information	Credits
	environmental responsibility of corporations, and international business law. It also emphasizes frameworks for conducting ethical analysis and the analysis of ethical dilemmas.	
BUS272	<p>PRINCIPLES OF FINANCE</p> <p>This course enables students to apply fundamental ideas of financial economics to problems in corporate finance. Participants will gain an overview of valuation principles, learn basic principles of corporate finance from the perspective of a financial manager, and through case studies, analyze important financial decisions made within firms.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ACT222 : Financial Accounting Principles I 	3
BUS301	<p>INTRODUCTION TO CONTINUOUS IMPROVEMENT METHODOLOGIES</p> <p>This course introduces students to concepts, tools, and skills essential for problem solving, decision making, and change management using continuous improvement methodologies. Continuous improvement methodologies covered in the course include introductions to Lean, Six Sigma, the Toyota Production System, and Agile. The course will include a class project.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS110 : Business Statistics • MTH110 : Elementary Statistics 	3
BUS310W	<p>BUSINESS ANALYTICS: RESEARCH METHODS</p> <p>This course introduces research methods and tools as the foundations of business analytics. Topics include problem definition, literature review, theory development, research design, sampling theory, construct measurement, data collection, data analysis, reporting results, interpreting findings, and developing actionable recommendations.</p>	3

Course Code	Course Information	Credits
BUS310W	BUSINESS RESEARCH AND ANALYTICS This course introduces traditional business research methods and business analytics as two sets of tools underlying data-driven business decision making. Students will practice analyzing data, reporting results, interpreting findings, and developing actionable recommendations. Pre-Requisites: Complete any 1 of the following 3 courses: <ul style="list-style-type: none"> • BUS110 : Business Statistics • MTH110 : Elementary Statistics • PSY213 : Statistics and Research Design 	3
BUS312	MARKETING RESEARCH Business leaders at all levels need to be intelligent designers and consumers of marketing research. The essential aspects of qualitative and quantitative marketing research design and execution are addressed with assigned readings, class discussions, homework problems, in-class exercises, cases, and a team led custom research study. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • BUS243 : Principles of Marketing 	3
BUS317	SYSTEMS ANALYSIS AND DESIGN This course introduces information systems analysis and design for contemporary organizations, with a focus on developing critical skills in communicating with people as users, analyzing processes, translating needs into information systems requirements, and testing of prototype ideas. Topics also include functional, structural, and behavioral modeling, and	3

Course Code	Course Information	Credits
	<p>Unified Modeling Language (UML).</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CMP283 : Database Management Systems 	
BUS319	<p>PROFESSIONAL SELLING</p> <p>This course introduces students to professional selling best practices. The curriculum addresses strategic planning techniques such as sales performance analytics, customer lifetime value, and social media networking. Tactical execution includes prospecting, lead generation, sales presentation development, and closing a sale. Role playing and sales strategy creation reinforces concepts with practice.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business • BUS243 : Principles of Marketing 	3
BUS350	<p>ADVERTISING AND PROMOTION</p> <p>This course offers a detailed study of advertising and promotion, including public relations and support media. An integrated marketing communications perspective is emphasized. Advertising and promotion are examined utilizing a range of media outlets, including the internet, television, consumer magazines and professional journals.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS243 : Principles of Marketing • BUS243W : Principles of Marketing 	3
BUS357	<p>STRATEGY AND ENTREPRENEURIAL VENTURES</p> <p>This course illustrates the strategic management framework by taking students through the entrepreneurial process from start-up growth while exploring the personal and professional challenges. The student examines key issues in opportunity</p>	3

Course Code	Course Information	Credits
	recognition, financing models, strategic choices, and sources of competitive advantage at different stages of the firm's development.	
BUS390	<p>HUMAN RESOURCES MANAGEMENT</p> <p>This course uses readings and case studies to assess and evaluate alternative approaches in staffing, training and development, organization development, performance appraisal, compensation, benefits, labor relations, and collective bargaining. The emphasis of the course is to help students understand these elements of human resources management within an integrated systems approach.</p>	3
BUS395W	<p>LEADERSHIP AND MANAGEMENT</p> <p>This course builds students' ability to identify challenges facing managers in 21st century organizations. The course covers theories and applications of leadership in the changing environment of today's world. Students learn organizational skills, presentation skills, and critical thinking skills. Writing skills are emphasized.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	3
BUS413	<p>OPERATIONS</p> <p>This course introduces students to technical tools and skills essential for problem solving and decision making in operations management. Topics include manufacturing and service operations, inventory optimization, network planning, demand forecasting, transportation planning, product planning, Lean and Six Sigma. Mastery of quantitative methods using spreadsheet modeling is required.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p>	3

Course Code	Course Information	Credits
BUS416	<p> <ul style="list-style-type: none"> • BUS110 : Business Statistics • MTH110 : Elementary Statistics • PSY213 : Statistics and Research Design </p> <p>COMPUTER NETWORKING & TELECOMMUNICATION</p> <p> This course introduces students to the foundational network technologies for data encoding and transmission. Topics may include telephone network and internet architecture, communication protocols (e.g., HTTP, SMTP), transport protocols (e.g., UDP, TCP), and network protocols (IP), TCP/IP, LANs, WANs, circuit vs. packet switching, network security, and multimedia. </p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • BUS171 : Information Systems and Operations 	3
BUS421	<p>INFORMATION AND CYBERSECURITY</p> <p> This course introduces fundamental issues in information and cybersecurity, with an emphasis on vulnerabilities available to cyber attackers. Students develop conceptual tools for identifying vulnerabilities, assessing threats, analyzing risk, and selecting controls to mitigate risk, and practical skills in implementing security, responding to incidents, and designing systems that prevent cyberattacks. </p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • BUS171 : Information Systems and Operations 	3
BUS423	<p>CONTINUOUS IMPROVEMENT PROJECT COURSE</p> <p> Students will advance their knowledge and application in the form of a continuous improvement project. The project will apply to a process (or processes) with a designated client. Students will work independently with stakeholders of the given process to make improvements using continuous improvement methodologies. </p>	3

Course Code	Course Information	Credits
BUS445	<p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• BUS301 : Introduction to Six Sigma <li>• BUS413 : Logistics and Operations <p>MARKETING STRATEGY</p> <p>This course examines the concepts and processes for gaining competitive advantage in the marketplace. It is designed around a marketing planning approach with an emphasis on strategic analysis and planning. The course takes a hands-on approach toward analyzing markets and market behavior, and matching strategies to changing market conditions.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• BUS243 : Principles of Marketing <li>• BUS243W : Principles of Marketing 	3
BUS450	<p>ADVANCED DATABASE</p> <p>This course examines advanced topics of database management, including system architecture, complex database objects, building database applications, designing data warehouses, and creating database infrastructure to support Big Data analytics. Students gain hands-on experience through the implementation of database systems, including storage management, query processing, transaction management, and security management.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• CMP283 : Database Management Systems 	3
BUS452	<p>MANAGING NONPROFIT ORGANIZATIONS</p> <p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision,</p>	3

Course Code	Course Information	Credits
	<p>strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • SWK101 : Introduction to Sociology • SWK102 : Introduction to Social Work, Social Justice and Social Issues 	
BUS462	<p>GLOBAL PROCUREMENT</p> <p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS105 : Foundations of Business 	3
BUS490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • BUS310W : Business Analytics: Research Methods • BUS312W : Marketing Research 	
BUS493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
BUS496	<p>DIGITAL MARKETING</p> <p>This course explores digital platforms that transform marketing, including the Internet, search engines, online advertising platforms, and digital analytics platforms. Through participation in real or simulated digital marketing projects, the student will critically apply principles of advertising, marketing analytics, and research methods.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS243 : Principles of Marketing • BUS243W : Principles of Marketing 	3
BUS498	<p>TUTORIAL: CAPSTONE RESEARCH PROJECT</p> <p>Tutorial: Capstone Research Project</p>	4
BUS499	<p>TUTORIAL: CAPSTONE RESEARCH PROJECT</p> <p>Tutorial: Capstone Research Project</p>	4
BUS506	<p>STATISTIC ESSENTIALS</p> <p>This course examines the fundamentals of research and quantitative methodology with emphasis on statistical analysis by business. Topics include statistical measures and distributions, application of probability to statistical inference, experimental design, hypothesis testing, linear correlation, and</p>	2

Course Code	Course Information	Credits
	statistical quality control. Focus is on business applications of statistics using problems and case studies.	
BUS508	<p>MARKETING ESSENTIALS</p> <p>This course will introduce student to marketing concepts relevant in any sector of business. Topics will include market analysis, product strategy, the marketing mix, and managing the marketing program. Course material will be resented through online discussion, collaborative activities, assigned readings, and team creation of a comprehensive marketing plan.</p>	2
BUS509	<p>ECONOMICS ESSENTIALS</p> <p>The introduction to market analysis examines the major areas of study within microeconomics and macroeconomics and teaches students to apply the basic tools of economic analysis to policy and business decision making. Topics include supply and demand, production functions, cost, market structure, inflation, unemployment and economic growth.</p>	2
BUS511	<p>HEALTH POLICY & ADVOCACY</p> <p>Analyze and synthesize innovative approaches to issues in health care delivery at all levels. Politics, policy, market forces, and advocacy are used to assess how system approaches affect health care delivery. Transformational leadership for political and policy activism are emphasized, while exploring regional, national, and global health issues and trends.</p>	3
BUS513	<p>LOGISTICS AND OPERATIONS</p> <p>This course introduces students to technical tools and skills essential for problem solving and decision-making in logistics and operations management. Topics may include inventory optimization, network planning, demand forecasting, transportation planning, and productions planning. Mastery of quantitative methods using spreadsheet modeling is required</p>	3

Course Code	Course Information	Credits
	for all students.	
BUS523	<p>CONTINUOUS IMPROVEMENT METHODS</p> <p>This course introduces students to the concepts, tools, and skills essential for problem solving, decision making, and change management using Continuous Improvements methodologies. Continuous improvement methodologies covered in the course include introductions to Lean, Six Sigma, the Toyota Production System, and Agile.</p>	3
BUS524	<p>AGILE FOR PRACTITIONERS</p> <p>This course will teach participants the principles and values of Agile, the most popular agile frameworks like Scrum, Kanban, Lean Software Development and Extreme Programming (XP), and help them apply Agile practices and techniques to their projects.</p>	1
BUS525	<p>LEADERSHIP AND COMMUNICATION SKILLS FOR PROJECT MANAGERS</p> <p>This course offers all necessary knowledge needed to be proficient as a project manager. Students learn how to apply leadership skills when leading teams and how best to communicate within those teams. The Myers-Brigg Type Indicator is used as a resourced to identify benefits of working in project teams.</p>	1
BUS526	<p>DESIGN THINKING</p> <p>Design Thinking is a problem-solving methodology especially well-suited for investigating ill-defined problems. It uses methods derived from the discipline of design to match people's needs with what is feasible and what a viable organizational strategy can convert into customer/stakeholder value in a financially sustainable way.</p>	1

Course Code	Course Information	Credits
BUS527	<p>SCRUM FOR ALL</p> <p>This course covers Scrum and the Scrum Master role in particular. The course focuses on what makes a great leader and how to overcome resistance to change and increase the effectiveness of your Agile initiatives. Originally formalized for software development, Scrum works well for any complex, innovative scope of work.</p>	1
BUS540	<p>LEADERSHIP FOR CHANGE IN HEALTHCARE ORGANIZATIONS</p> <p>Focuses on the needs of health care leaders to take health care delivery into the future through innovative initiatives. Includes: variables impacting health care delivery systems; reimbursement and funding for design change; managing competition; creating the health care delivery system of the future; and managing human and financial resources.</p>	3
BUS550	<p>INNOVATION AND COMMERCIALIZATION</p> <p>This course focuses on how to successfully commercialize an innovation. Understanding commercialization activities such as pre-product launch planning, market testing, actual product launch, and post-launch follow-up is a major part of the course. The course provides a run-through of the complete cycle from idea to market entry.</p>	3
BUS551	<p>INFORMATICS IN HEALTHCARE</p> <p>This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>	3

Course Code	Course Information	Credits
BUS552	<p>MANAGING NON-PROFIT ORGANIZATIONS</p> <p>Through the use of case studies, assignments, and class projects, this course familiarizes students with the distinctiveness of nonprofit organizations and their management. Specific topics include marketing and fund raising, budgeting, personnel management and supervision, strategic planning and implementation, environmental and program evaluation, and managing interorganizational networks.</p>	3
BUS562	<p>GLOBAL PROCUREMENT</p> <p>In this course, students examine success factors, ethical challenges, legal issues, and managerial implications of global procurement. Students also develop a deep understanding of the impact of procurement on quality, cost, and efficiency of supply chain management through use of procurement tools, techniques, and methodologies.</p>	3
BUS570	<p>GLOBAL BUSINESS</p> <p>This course introduces students to international business and management by studying cultural influences, government, and business structures in our global economy. Students also learn about trade relations, international finance and legal and labor agreements. Also covered, are topics on information needs, production systems, marketing and promotion, and career planning.</p>	3
BUS571	<p>BUSINESS COMMUNICATION</p> <p>This course targets key aspects of business communication: persuasive presentation skills, writing skills and listening skills. Students will be more effective in "selling" ideas to others, developing a more effective and adaptable communication strategy, and aligning objectives with those of the audience.</p>	3

Course Code	Course Information	Credits
BUS573	<p>STRATEGY AND ENTREPRENEURSHIP</p> <p>The course requires the student to take the Chief Executive Officer's (CEO) perspective and consider strategies to develop resources and capabilities needed to gain and sustain competitive advantage for both established firms and entrepreneurial ventures. Strategic analyses employed in this course critically examine the direction and goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. The skills to develop and successfully implement strategy in different types of firms across industries are refined through case analyses and simulations, with a particular emphasis on entrepreneurship.</p>	3
BUS575	<p>LEADING ORGANIZATIONS AND PROJECTS</p> <p>The course cultivates the student's executive leadership potential for organizational development and transformation, with specific applications to the project management environment. Theoretical perspective and case analyses will explore topics of leading one's self, motivating project teams, change management, and transforming the organization.</p>	3
BUS576	<p>SUSTAINABLE HUMAN CAPITAL</p> <p>Cultivate theoretical understanding and ethical and practical skills for managing human capital. Explore individual, group, and organizational levels of analysis focusing on topics of motivation, communication, group dynamics, decision making, culture, power, and politics. Analyze the effectiveness of tools for talent acquisition and development, such as compensation, feedback, and assessment.</p>	3
BUS577	<p>INFORMATION SYSTEMS AND ANALYTICS</p>	3

Course Code	Course Information	Credits
BUS580	<p>This course explores the strategic management of technology, information, and people from a Chief Information Officer's (CIO) perspective. The business value and organizational challenges of enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, data warehouses, analytics, and Big Data are critically examined through cases and hands-on projects.</p> <p>This course provides an intellectual framework in which to consider the ways society and organizations affect an individual's and corporation's ethical decision making. Students apply ethical decision tools to the numerous moral challenges confronting them in their professional careers. The global context of ethical decision making is examined.</p>	2
BUS582	<p>This course explores the knowledge areas and project stages from the Project Management Body of Knowledge (PMBOK). Students acquire concepts and skills in initiating, planning, executing, monitoring, controlling, and closing projects. The course examines the management of project integration, scope, time, cost, human resources, communications, risk, and procurement.</p>	3
BUS607	<p>In this course the student will develop conceptual, ethical, and practical skills for managing people through the understanding of, and effective use of HR systems including compensation packages, feedback loops, assessment measures etc. In addition, ethical, legal and strategic issues concerning diversity, international HR challenges as well as domestic situations will be examined.</p>	2

Course Code	Course Information	Credits
BUS608	<p>ECONOMICS FOR MANAGERS</p> <p>The goal of this course is to provide students with the tools and concepts from managerial economics that practicing managers can and do use. Drawing on issues in both microeconomics and macroeconomics, fundamental principles are applied to business decision-making.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS509 : Economics Essentials 	2
BUS609	<p>BUSINESS AND SUSTAINABILITY</p> <p>This course covers basic questions concerning sustainability and the challenges in reconciling free-market capitalism with the need for more sustainable business practices. Among topics covered will be: the need to translate real-world sustainability challenges into future business opportunities, and the economic moral challenges involved with the creation of a sustainable world.</p>	2
BUS610	<p>STATISTICAL APPLICATION TO BUSINESS EFFICIENCY</p> <p>This course is designed to expose students to the essential concepts and methodologies of business improvement techniques used to improve the effectiveness and efficiency of business operations, increase profitability, eliminate waste, and reduce costs. Quality management principles including continuous process improvement, Six Sigma, and lean manufacturing/service will be introduced.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS506 : Statistic Essentials 	2
BUS611	<p>HEALTHCARE QUALITY MEASUREMENT</p>	3

Course Code	Course Information	Credits
	<p>This 3 credit course will address the quality of healthcare in the United States. Key issues relating to quality of care will be analyzed from the perspectives of health care systems, providers, patients and payers. The course will also address the various methods of assessment and quality control for patient care. Students will learn to understand and apply the science of studying and measuring the flow of work in providing patient care. Methods of Quality Control (including QA/QC, Deming and TQM) will be covered in detail. Substantive case analyses will add depth to the course.</p>	
BUS612	<p>HEALTHCARE ECONOMICS AND REIMBURSEMENT</p> <p>This course applies microeconomic principles to analyze the drivers of healthcare behavior, the supply and demand for healthcare services, and the impact of insurance on the demand for healthcare services and the role of government in healthcare markets.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS506 : Statistic Essentials • BUS509 : Economics Essentials 	2
BUS613	<p>HEALTH POLICY AND HISTORY</p> <p>This course will provide an introduction to the history, structure and current issues in the United States' health care system. The interrelationships of the major stakeholders in the system, including providers, patients and payers, will be examined in detail. Particular attention will be given to the influence of legislative bodies, lobbyists and regulatory agencies.</p>	2
BUS618	<p>ECONOMICS FOR MANAGERS</p> <p>This course teaches how economic tools and techniques can be used to solve business problems. Economics describes why firms do what they do and points to business strategies. The course focuses on economic applications. The course provides</p>	3

Course Code	Course Information	Credits
	an understanding of how economics influences marketing, management, and other business-related decisions.	
BUS623	<p>STRATEGIC PERFORMANCE FOR EXECUTIVES</p> <p>This course will cover issues specific to business leaders such as conflict management, negotiation and persuasion, mentoring structures, crisis communication, and organizational change. Other topics will include implicit and explicit attitude toward authority in the workplace; implicit social cognition; attitudes, self-esteem, and stereotypes, etc.</p>	3
BUS639	<p>SUSTAINABILITY AND ASSESSMENT REPORTING</p> <p>An in-depth study of how to measure, track, and report on sustainability issues in a business. Includes a study of how to create effective Social Responsibility reports and the standards currently used to measure sustainability. Teaches students how to monitor and measure sustainability issues from within a business.</p>	3
BUS641	<p>SUSTAINABLE SUPPLY CHAIN MANAGEMENT</p> <p>This course provides students with an understanding of how supply chain works, how and where along the supply chain sustainability questions should be addressed/considered, and the impacts of those decisions on stakeholders further down the chain. Topics include: packaging, transportation, energy use, and waste.</p>	3
BUS643	<p>INTERNATIONAL FIELD EXPERIENCE</p> <p>MBA students attain firsthand understanding of the markets and corporate settings of foreign countries through supervised experience, observation, interaction and research/analysis. This course provides that critical knowledge with a ten day study abroad field experience. While not required for graduation, BUS 643 is highly recommended. Additional Fee(s): Travel fee.</p>	3

Course Code	Course Information	Credits
BUS652	<p>MANAGERIAL ACCOUNTING</p> <p>This course examines accounting information that is used in managerial decision making within the organization. Focus is on interpretation of financial statements, cost accounting, financial planning and analysis, the development of internal controls, and constructing budgets.</p>	3
BUS661	<p>LOGISTICS AND OPERATIONS</p> <p>logistics and operations</p>	3
BUS662	<p>GLOBAL PROCUREMENT</p> <p>Global Procurement</p>	3
BUS671	<p>MARKETING MANAGEMENT</p> <p>This course takes the Chief Marketing Officer's (CMO) perspective to explore marketing as a core business practice. Discussions focus on theories and principles for interfacing with customers, competitors, partners, and the external environment. Concepts are applied to planning and executing the conception, pricing, promotion, and distribution of goods and services.</p>	3
BUS671PLA	<p>MARKETING MANAGEMENT</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
BUS672	<p>CORPORATE FINANCE</p> <p>This course deepens an understanding of financial analysis tools and concepts. Students will learn how and when to use the financial-analytical tools required to make effective business</p>	3

Course Code	Course Information	Credits
	and policy decision. Functional areas addressed are assessing financial health, planning financial performance, interpretation of data and recommendations, supply-chain management.	
BUS673	LEGAL ASPECTS OF BUSINESS This course introduces business law and the legal system in preparation for dealing with legal business issues and attorneys. Topics include civil procedure, torts, strict liability, legal fees and case management, common law contracts, the Uniform Commercial Code, partnerships, corporate law, estates and trusts, secured transactions, third-party rights, property, insurance, securities law, and ethics.	3
BUS680	COMPLEX ISSUES IN PROJECT MANAGEMENT Case studies and simulations engage students in the examination of complex issues in project management, such as control, portfolio management, and rescuing failing projects. The Student will be able to analyze, evaluate, and optimize projects in specific environments and industries. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • BUS582 : Foundations of Project Management 	3
BUS691	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
BUS692	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course:	2

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
BUS698	<p>STRATEGY AND ENTREPRENEURSHIP</p> <p>"Develop strategies to gain and sustain competitive advantage. Examine the goals of an organization, the social, political, technological, economic, and global factors in the business environment, industry structure, market dynamics, and firm strengths and weaknesses. Develop and implement strategy across industries, and as an entrepreneur, through case analyses and simulations. "</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BUS671 : Marketing Management 	3
BUS699	<p>BUSINESS CONSULTING CAPSTONE</p> <p>This course is the culminating experience in the MBA program. Students apply professional-level business consulting skills learned in the MBA program. Business Consulting Capstone student teams solve business problems for businesses and entrepreneurs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS672 : Corporate Finance • BUS698 : Strategy and Entrepreneurship 	3
CHM102	<p>CHEMISTRY IN CONTEXT</p> <p>One semester lecture course with selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological and environmental issues. Topics include matter, energy, atomic and molecular structure, bonding, reaction chemistry, and radioactivity. Three hours of lecture per week. Not open to majors in biology or chemistry.</p>	3
CHM102L	<p>CHEMISTRY IN CONTEXT LAB</p>	1

Course Code	Course Information	Credits
	One semester laboratory course to accompany CHM102 Chemistry in Context. Two hours of lab per week. Not open to majors in biology or chemistry.	
CHM105	<p>GENERAL CHEMISTRY</p> <p>This class covers the same material as Chemistry 107 below, but is specifically structured for students who have had little or no previous chemistry experience, or who need extra help with algebraic problem solving. Three hours of lecture and one hour of recitation per week. Co-requisite: CHM 109</p>	3
CHM107	<p>CHEMISTRY I</p> <p>This class begins with a study of atomic structure, then expands to cover chemical naming, patterns of reactivity, thermochemistry, the interaction of light and matter, atomic orbitals, ionic and covalent bonding, and molecular shapes. This class concludes with an introduction to organic chemistry and biochemistry. Three hours of lecture per week. Co-requisite: CHM 109</p>	3
CHM108	<p>CHEMISTRY II</p> <p>The second semester of general chemistry continues exploring the structure, properties, and bonding of atoms and molecules, with emphasis on the physical characteristics of gases, liquids, solids and solutions, chemical equilibria, thermodynamics, and kinetics. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CHM105 : General Chemistry • CHM107 : Chemistry I 	3
CHM109L	<p>CHEMISTRY I LABORATORY</p> <p>Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated</p>	1

Course Code	Course Information	Credits
	with the lectures in Chemistry 105 and Chemistry 107. Three hours of laboratory per week. Corequisite: CHM 105 or 107. Additional Fee(s): Laboratory fee.	
CHM110L	<p>CHEMISTRY II LABORATORY</p> <p>Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in Chemistry 108. Three hours of laboratory per week. Corequisite: CHM 108. Additional Fee(s): Laboratory fee.</p>	1
CHM205	<p>ORGANIC CHEMISTRY I</p> <p>Development of the structural theory of organic compounds. Relationship of structure to reactivity, stereochemistry, types of organic reactive intermediates, and the chemistry of alkanes, alkenes, and aromatic compounds are covered. Three hours of lecture per week. Co-requisite: CHM 215.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM108 : Chemistry II • CHM110L : Chemistry II Laboratory 	3
CHM206	<p>ORGANIC CHEMISTRY II</p> <p>Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is covered during the last third of the term.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM205 : Organic Chemistry I • CHM215L : Elementary Organic Laboratory 	3
CHM209	<p>INORGANIC CHEMISTRY</p> <p>A descriptive survey of inorganic chemistry, including bonding</p>	3

Course Code	Course Information	Credits
	<p>theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 : Chemistry II 	
CHM215L	<p>ELEMENTARY ORGANIC LABORATORY</p> <p>Basic manipulative skills, including introduction to several chromatographic techniques, are followed by chemistry of alkenes and aromatic compounds. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	2
CHM216L	<p>ORGANIC CHEMISTRY LABORATORY</p> <p>Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L : Elementary Organic Laboratory 	2
CHM216LW	<p>ORGANIC CHEMISTRY LABORATORY</p> <p>Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L : Elementary Organic Laboratory 	2
CHM311	<p>PHYSICAL CHEMISTRY I</p> <p>Thermodynamic descriptions of chemical systems, emphasizing gases and solutions. Phase transitions and phase equilibria, chemical equilibria, kinetics, and electrochemistry. Three hours of lecture per week.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM108 : Chemistry II 	
CHM312	<p>PHYSICAL CHEMISTRY II</p> <p>Quantum mechanics, spectroscopy, introduction to symmetry, and introduction to statistical mechanics. Four hour lectures per week.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM311 : Physical Chemistry I 	4
CHM317L	<p>INTEGRATED CHEMISTRY LABORATORY</p> <p>Experiments are selected to illustrate important principles of advanced experimental chemistry and familiarize students with important experimental methods. The course is intended to encourage students to think critically about the reliability of their experimental results in the light of their previous chemistry experience. Five hours of laboratory per week.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • CHM311 : Physical Chemistry I 	2
CHM317LW	<p>INTEGRATED CHEMISTRY LABORATORY</p> <p>Experiments are selected to illustrate important principles of advanced experimental chemistry and familiarize students with important experimental methods. The course is intended to encourage students to think critically about the reliability of their experimental results in the light of their previous chemistry experience. Five hours of laboratory per week. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM216L : Organic Chemistry Laboratory 	2

Course Code	Course Information	Credits
CHM317W	<p>INTEGRATED CHEMISTRY LAB</p> <p>Experiments are selected to illustrate important principles of advanced experimental chemistry and familiarize students with important experimental methods. The course is intended to encourage students to think critically about the reliability of their experimental results in the light of their previous chemistry experience. Five hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	2
CHM318L	<p>CHEMICAL ANALYSIS LABORATORY</p> <p>This laboratory teaches the proper design, implementation and analysis of modern techniques in instrumental chemistry, encompassing spectroscopy, electrochemistry, and separation science. In addition, several inorganic compounds are synthesized and characterized. Student-originated research projects are used extensively throughout this course. Seven hours of laboratory per week. Cross-listed as BIO418. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM216L : Organic Chemistry Laboratory 	3
CHM322	<p>TOPICS IN ANALYTICAL CHEMISTRY</p> <p>This course explores the fundamental chemical principles underlying modern chemical instrumentation. Students learn the advantages and limitations of these instruments, how to select the proper instrumental configuration for a specific experiment, and how to evaluate emerging chemical technologies. Three hours of lecture per week. Corequisite: CHM 318</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM215L : Elementary Organic Laboratory <p>Co-Requisites:</p> <ul style="list-style-type: none"> • CHM318L : Chemical Analysis Laboratory 	3
CHM338	BIOCHEMISTRY I	3

Course Code	Course Information	Credits
	<p>This course covers the structure and functions of proteins, polynucleic acids, and biological membranes. Enzymes and kinetics are taught. Metabolic pathways, with emphasis on the thermodynamics of the equilibria and the storage and usage of energy, are covered. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM205 : Organic Chemistry I 	
CHM339	<p>BIOCHEMISTRY II</p> <p>Metabolism is studied with an emphasis on anabolic pathways and special pathways such as cytochrome P450. Other topics include molecular genetics and protein synthesis, hormones and receptors, and immunology. Three hours of lecture per week. Cross-listed as BIO438</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CHM206 : Organic Chemistry II • CHM338 : Biochemistry I 	3
CHM340L	<p>MACROMOLECULE LABORATORY</p> <p>An advanced laboratory course for junior and senior science majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO. Additional Fee(s): Laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM338 : Biochemistry I 	2
CHM340LW	<p>MACROMOLECULE LABORATORY</p> <p>An advanced laboratory course for junior and senior science</p>	2

Course Code	Course Information	Credits
	<p>majors who wish to gain theoretical and practical experience with the techniques and equipment commonly used in the fields of cellular biology, molecular biology, and biochemistry. Topics include PCR, electrophoresis, enzyme kinetics, aseptic cell and tissue culture, cell surface receptors, and molecular modeling. Five-hour laboratory with one-hour pre-lab lecture each week. Cross-listed as BIO 440. Additional Fee(s): Laboratory fee.</p>	
CHM343	<p>ENVIRONMENTAL CHEMISTRY</p> <p>This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Cross-listed as ENV 443. Three hour lecture per week.</p> <p>Pre-Requisites: Complete any 1 of the following 5 courses:</p> <ul style="list-style-type: none"> • CHM205 : Organic Chemistry I • CHM206 : Organic Chemistry II • CHM209 : Inorganic Chemistry • CHM215L : Elementary Organic Laboratory • CHM216L : Organic Chemistry Laboratory 	3
CHM443	<p>ENVIRONMENTAL CHEMISTRY</p> <p>This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment and shows the power of chemistry as a tool to help us comprehend the changing world around us. Three hours of lecture per week. Cross-listed as ENV 443.</p>	3
CHM490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a</p>	3

Course Code	Course Information	Credits
	<p>world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IND350 : Scientific Research Methods 	
CHM491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
CHM492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
CHM493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
CHM498	<p>TUTORIAL: CHEMISTRY</p> <p>Tutorial: Chemistry</p>	4

Course Code	Course Information	Credits
CHM499	TUTORIAL: CHEMISTRY Tutorial: Chemistry	4
CHM503	INTRODUCTION TO GREEN CHEMISTRY Green chemistry was defined by Paul Anastas in the 1990s as "the design of chemical products and processes that reduce or eliminate the use and generation of hazardous compounds." Stated broadly, this course helps students understand the notion of sustainability and how it applies to chemistry. It also explores the history of chemistry, outlines the critical need for green chemistry, and explores the principles that guide its practice.	3
CHM515	LIFE-CYCLE ASSESSMENT Study of objective processes used to evaluate the environmental burdens associated with a product, process, or activity. This involves identifying energy, materials, and wastes in order to evaluate and implement opportunities to affect environmental improvements. Material and energy flow analyses (e.g., mass balancing) are covered for a variety of scales, such as an individual business, industrial sector, or an entire economy.	3
CHM516	CHEMICAL PROCESS PRINCIPLES Fundamental concepts of chemical engineering; problem-solving techniques; applications to the environment and sustainability of stoichiometry, material and energy balances, and phase equilibria; bioprocesses and how to make things from renewable resources.	3
CHM520	INTERNSHIP INTERNSHIP	1

Course Code	Course Information	Credits
CHM543	<p>ADVANCED ENVIRONMENTAL CHEMISTRY</p> <p>This course is an advanced study of the chemical principles underlying common environmental problems. It aims to deepen the student's knowledge of chemistry and its role in the environment.</p>	3
CHM607	<p>CATALYSIS</p> <p>Catalysis lies at the heart of many chemical processes, from the academic research lab through living systems to the industrial large-scale reactor. By understanding and careful use of catalysis many processes can be made faster, cleaner and more sustainable. This course will provide training in the state-of-the-art of catalysis theory, application, preparation and analysis.</p>	3
CHM692	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
CHM698	<p>GREEN CHEMISTRY PRACTICES I-INDUSTRIAL CHALLENGES</p> <p>In the first of this two-course sequence a series of professionals from the region are invited to present to the class. These presentations will present problems/projects being addressed by local industry. Groups of students will choose one, design a protocol to follow, and present their protocol to the class.</p>	3
CHM699	<p>GREEN CHEMISTRY PRACTICES II-INDUSTRIAL SOLUTIONS</p> <p>The second part of a two-course sequence; students will</p>	3

Course Code	Course Information	Credits
	<p>complete a project they propose in CHM698 in conjunction with a local industry/business.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM698 : Green Chemistry Practices I-Industrial Challenges 	
CMP120	<p>INTRODUCTION TO PROGRAMMING</p> <p>An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.</p>	3
CMP150	<p>ON-LINE GENEALOGY</p> <p>This course is an introductory study of all aspects of personal and family history, and genealogical research, with a strong emphasis on computer search engines. Methods used to identify individuals and their ancestors will be surveyed, emphasizing the scientific approach to genealogical research, rather than chance.</p>	3
CMP202	<p>INTRODUCTION TO PROGRAMMING</p> <p>An introduction to programming using C++ for students with no previous computer programming experience. Includes introduction to algorithms and object-oriented programming techniques.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CMP140 : Introduction to Computer Science 	3
CMP220	<p>COMPUTER PROGRAMMING II</p> <p>In this course students learn to develop computer programs using a modern object-oriented language such as java, python, or C#. Topics covered include user-defined classes, inheritance, polymorphism, data structures such as linked lists, stacks, queues, and trees, sorting and searching algorithms, recursion,</p>	3

Course Code	Course Information	Credits
	<p>event-driven programming and exceptions.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CMP120 : Introduction to Programming 	
CMP283	<p>DATABASE MANAGEMENT SYSTEMS</p> <p>This course is a study of database management systems and their applications to a wide range of information processing needs. Students design and implement database management systems while being introduced to a conceptual model of a database environment comprised of five basic components: databases, database management systems, data dictionary/directory systems, database administration, and user-system interfaces.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CMP120 : Introduction to Programming • CMP202 : Introduction to Programming 	3
COM101	<p>FOUNDATIONS OF HUMAN COMMUNICATION</p> <p>A survey of the discipline of communication studies with emphasis on multiple theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. This course explores the basic history, assumption, principles, processes, variables, methods, and specialization of human communication as an academic field of study.</p>	3
COM106	<p>MEDIA AND SOCIETY</p> <p>The effects of mass communication on individuals and society, particularly as they relate to values and ethics, are examined. The course emphasizes the history and structure of the mass media.</p>	3

Course Code	Course Information	Credits
COM151	<p>INTRODUCTION TO REPORTING</p> <p>This course covers the fundamentals of reporting and includes identifying different types of news sources, properly quoting interviewees, and orientation to basic media ethics, differentiating between opinion and analysis, confirming facts in the course of reporting, and finally writing skills.</p>	3
COM209	<p>INTERCULTURAL COMMUNICATION: VALUES AND ETHICS</p> <p>Course will provide the student with an appreciation of the complexities involved in the development of beliefs, attitudes and behaviors that reflect cultural values. This course will provide an understanding of the specific forces, which shape perceptions, feelings and behaviors of various cultural groups. These forces include socially constructed categories such as race, ethnicity, nationality, gender, socio-economic status, and religion. These will be explored in a variety of contexts, language, family structures and the handling of conflict of laws and ethics (cultural relativism) will be examined.</p>	3
COM213	<p>SPECIAL TOPICS IN COMMUNICATIONS</p> <p>Special Topics in Communications</p>	3
COM234W	<p>PERSUASION</p> <p>This course explores rhetorical and experimental studies of persuasion. It introduces the student to research in the field and critically examines some of the techniques developed in "selling" products, politics, and culture. It also examines the ethical considerations relevant to these techniques.</p>	3
COM251	<p>NEWS WRITING AND EDITING</p> <p>This is an introduction to journalistic writing and editing for print</p>	3

Course Code	Course Information	Credits
	and the Web. Students will explore lede writing, interviewing and structuring stories in a variety of styles. They also will learn Associated Press style. At the core of the class is an emphasis on ethics and news judgment.	
COM251L	COMMUNIQUE LAB	1
	A one-credit pass-fail lab section attached to COM 251: Newswriting and Editing. Credit will be awarded upon a student's fulfillment of a staff position on The Communiqué over the course of one semester. A student may register for this lab a maximum of three times during her undergraduate years.	
COM255	THE COMMUNIQUE NEWSROOM I	3
	This PRO course is designed to give students hands-on training in the various roles that work together to make a multiplatform newsroom function by fulfilling a staff position with the Communiqué. Students will develop skills related to developing/pitching story ideas, beat reporting, story budgets, print newspaper design and digital journalism.	
COM256	THE COMMUNIQUE NEWSROOM II	3
	This course will give students hands-on training in the roles that work together to make a multiplatform newsroom function, with an emphasis on newsroom management. By fulfilling a staff position with the Communiqué, students will work on skills for developing/pitching stories, beat reporting, budgets, newspaper design and digital journalism.	
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • COM251 : News Writing and Editing • COM255 : The Communiqué Newsroom I 	
COM260W	PRACTICAL PUBLIC RELATIONS	3
	Students learn the theories, practical writing skills, and	

Course Code	Course Information	Credits
	strategies involved in planning and implementing public relations campaigns. The course is an exploration in how to influence public opinion/behavior and build connections with legacy and new media outlets through effective, ethical, and socially responsible communication.	
COM310W	ENVIRONMENTAL COMMUNICATION	3
	<p>This writing-intensive course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • COM106 : Media and Society • COM141 : Media Literacy 	
COM313	SPECIAL TOPICS	3
	Special Topics	
COM351	ADVANCED NEWS WRITING AND EDITING	3
	<p>Students will build upon foundational skills and apply them to writing a variety of multi-source story styles, deadline writing, and briefs. The course also will cover advanced headline writing, copy editing, and media law basics, as well as the challenges and opportunities surrounding newsroom management/leadership in the digital age.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • COM251 : News Writing and Editing 	
COM351L	STAFF POSITION: THE COMMUNIQUÉ	1
	Pass-fail lab section attached to COM351: Advanced	

Course Code	Course Information	Credits
	<p>Newswriting and Editing. Credit will be awarded upon students fulfillment of a staff position on the Communique over the course of the semester. A student may register for this lab or COM251L a maximum of three times during her undergraduate year.</p>	
COM355	<p>ORGANIZATIONAL COMMUNICATION</p> <p>Organizational Communication will focus on five theoretical approaches to the study of communication in organizations. Those approaches are: classical, human relations/human resources, systems, cultural, and critical, with most time spent on the final theoretical perspective. Additionally, the course will examine how communication affects the gendered nature of the workplace.</p>	3
COM360	<p>ADVANCED PUBLIC RELATIONS</p> <p>Students will sharpen PR writing skills and critical thinking by applying communication theories and methods to analyzing case studies, developing multiplatform campaigns, and crafting crisis management plans. An emphasis on strategy will prepare students to work with clients in a range of industries, including small businesses, corporations, agencies, and nonprofits.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • COM260 : Practical Public Relations • COM260W : Practical Public Relations 	3
COM365	<p>VISUAL COMMUNICATION</p> <p>This course introduces students to the process of developing a Visual Communication system with a special focus on non profit branding. An understanding of branding strategies are researched, explored and implemented to help serve the needs of growing community-based non-profits. Visual Identities are created for existing small non-profits to address their needs as well as strengthen their position in the marketplace and</p>	3

Course Code	Course Information	Credits
	community.	
COM374	DOCUMENTARY AND PHOTOJOURNALISM	3
	<p>This course focuses on photojournalistic practice and social documentary. Students analyze news topics from a practical, ethical, and visual perspective, to produce images that tell stories. Students will be introduced to a variety of approaches with an emphasis on point of view. Additional Fee(s): Applied laboratory fee</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ART152 : Photography II - Introduction to Digital Photography • FDT150 : Introduction to Digital Video Production 	
COM416	ENVIRONMENTAL COMMUNICATION	3
	<p>This course provides an overview of contemporary environmental communication theory, practice, and criticism. Students interrogate topics such as the meaning of "green" or "sustainable," social justice and environmental advocacy, and public participation in environmental decision-making.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • COM106 : Media and Society • COM141 : Media Literacy 	
COM490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone , undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative</p>	

Course Code	Course Information	Credits
	<p>capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FDT300W : Critical Theory 	
COM492	INDEPENDENT STUDY	2
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
COM493	INDEPENDENT STUDY	3
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
COM498	TUTORIAL: COMMUNICATION	4
	<p>Tutorial: Communication</p>	
COM499	TUTORIAL: COMMUNICATION	4
	<p>Tutorial: Communication</p>	
COM510	HEALTH COMMUNICATIONS	3
	<p>Course provides an introduction to the essential concepts and theories of health communication. Students study how individuals understand health issues and how communication processes help shape and influence our acceptance of health-related messages. Topics include health literacy, media coverage of health issues, and health risk communications.</p>	

Course Code	Course Information	Credits
COM515	<p>ENVIRONMENTAL COMMUNICATIONS</p> <p>Course offers an overview of environmental communications providing an analysis of how individuals, institutions and corporations describe and portray our interactions with the environment. Discussion topics include environmental discourse, environmental conflicts, risk communication, environmental disasters, environmental social movements, and the nature-society relationship.</p>	3
COM518	<p>STRATEGIC COMMUNICATIONS</p> <p>Course provides an overview of concepts, tactics and skills employed in strategic internal and external communications. Students learn how to determine the communications objective(s), define the target audience(s) and stakeholders, and develop key messages to improve strategic communications.</p>	3
COM525	<p>COMMUNICATIONS RESEARCH AND THEORY</p> <p>Course provides an overview of the major theoretical and research developments in the communications discipline. The emphasis will be on the application of theory to practice and on applied research. Topics include quantitative and qualitative research methods, research ethics, and the history of development of communication theories.</p>	3
COM528	<p>RISK AND CRISIS COMMUNICATIONS</p> <p>Students acquire an understanding of crisis management and risk communication. Course topics include public opinion research, data collection and analysis, crisis and risk management theory, and communication tactics and strategies. Students develop case studies relating to their areas of professional interest.</p>	3

Course Code	Course Information	Credits
COM550	<p>ORGANIZATIONAL COMMUNICATIONS</p> <p>Course covers current theory and research in the area of organizational communications. Includes formal and informal organizations and public and private organizations. Topics include organizational culture, employee information needs, decision making, leadership and power. Emphasis will be placed on developing the analytical tools to analyze and improve organizational communications.</p>	3
COM613A	<p>SPECIAL TOPICS:</p> <p>This course will explore different special topics in professional writing.</p>	1
COM613C	<p>SPECIAL TOPICS:</p> <p>This course will explore different special topics in communication.</p>	3
COM625	<p>COMMUNICATIONS CAMPAIGNS</p> <p>Students explore the use of communication campaigns to reduce health risks and promote public health and awareness. Course prepares students to develop, implement, and assess health campaigns. Drawing on health behavior theory and communication research and theory, students work on case studies and develop original campaigns employing multiple communication channels.</p>	3
COM675	<p>COMMUNICATION LAW & ETHICS</p> <p>Course provides an examination of the legal and ethical dimensions of communications. The historical development of media law is covered, although emphasis is placed on contemporary legal issues. Students explore complex ethical challenges facing media practitioners through case studies, exercises and class discussions.</p>	3

Course Code	Course Information	Credits
COM685	<p>COMMUNICATIONS PROJECT</p> <p>This is the capstone project for all students in the Master's in Communications program. This applied learning experience builds upon previous coursework. Students develop a major project designed to meet their professional interests. The project will demonstrate mastery of the knowledge and skills gained throughout the program.</p>	3
COM691	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
COM693	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
COR145	<p>FOUNDATIONS OF EFFECTIVE WRITING</p> <p>This course is designed to provide writing support and instruction for first-year students enrolled in College Seminars. Supplemental instruction focuses on the development of writing skills necessary for successful completion of the College Seminar and applicable to other courses across the curriculum.</p>	1
COR492	<p>SUPPLEMENTAL INSTRUCTION IN WRITING II</p> <p>Supplemental Instruction in Writing II</p>	2

Course Code	Course Information	Credits
CRM101	INTRODUCTION TO CRIMINAL JUSTICE This course is an introduction to U.S. criminal justice system. Topics covered include the nature of crime, law, justice, police, functions of courts, and the effectiveness of punishment and sanctions. Also explored will be the roles of various professionals in the system to introduce students to potential career paths.	3
CRM220	WOMEN AND THE CRIMINAL JUSTICE SYSTEM This course focuses on three aspects of women's involvement in the criminal justice system: as victims, offenders, and professionals. Coverage will include theories and facts about women offenders, the impact of crime on women victims and survivors, and special issues facing women who pursue careers in policing, corrections and law.	3
CRM224	JUVENILE JUSTICE Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as SWK 224.	3
CRM225W	CRIMINOLOGY Criminology is the study of crime, its causes and effects. This course covers definitions and types of crime, research methods, theories of criminal behavior and responses to crime. Crimes against people, property, and organizations will be examined, and biological, psychological, and sociological explanations will be discussed. Pre-Requisites: Complete the following course:	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	
CRM305	<p>CRIMINAL INVESTIGATIONS</p> <p>Survey of the history, theory, and practice of criminal investigations conducted by law enforcement officers and private investigators. Crime scene documentation, search and seizure, interview and interrogation, suspect identification and arrest procedures are applied to both violent and property crimes. Report writing and courtroom presentation are also covered.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	3
CRM305	<p>LAW ENFORCEMENT AND CRIMINAL INVESTIGATIONS</p> <p>Survey of the history, theory, and practice of criminal investigations conducted by law enforcement officers and private investigators. Crime scene documentation, search and seizure, interview and interrogation, suspect identification and arrest procedures are applied to both violent and property crimes. Report writing and courtroom presentation are also covered.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	3
CRM310	<p>SURVEY OF CORRECTIONS</p> <p>This course provides both a historical and contemporary exploration of correction methods utilized in the United States. This course examines the philosophy, theory, and practices involved in the control and behavior modification of offenders. Issues of inequality and at-risk populations are explored.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	
CRM313	<p>SPECIAL TOPICS</p> <p>This course allows in-depth exploration of a special topic in criminology. Possible topics include organized crime, the death penalty, victimization of children and adolescents, and media portrayals of forensics and forensic professionals.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	3
CRM320	<p>CRIMINALIZATION OF MENTAL ILLNESS</p> <p>This course explores the intersection of the criminal justice and mental health systems. Areas of focus include: the impact of governmental policies, law changes, prevalence of mental illness among offender populations, the biopsychosocial status of offenders, and interventions that assist offenders transitioning back into society.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice • PSY101 : General Psychology • SWK101 : Introduction to Sociology 	3
CRM332	<p>HISTORY OF CRIME AND PUNISHMENT</p> <p>This course will provide an introduction to the historical study of crime and punishment. Specifically, the course will examine definitions of crime, goals of punishment, and how these forms of crime and punishment reflect the structure of that society within that specific historical context.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	3
CRM340	<p>VIOLENT AND PREDATORY CRIMES</p>	3

Course Code	Course Information	Credits
	<p>The criminology and victimology of violent and predatory crimes are explored from psychological, sociological, and biological perspectives. Serial, spree, rampage, and mass murder are covered. Students will gain increased understanding of violent and predatory criminals, their victims, social science research methods, forensic investigations, and criminal law.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	
CRM362	<p>WHAT IS EVIL?</p> <p>This course will utilize an interdisciplinary framework (criminology, sociology, psychology, history, political science) to examine definitions of "evil," motivations to commit "evil" actions, social reactions to "evil," and control of "evil."</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice • PSY101 : General Psychology 	3
CRM490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	3

Course Code	Course Information	Credits
CRM491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
CRM492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
CRM493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
CRM494	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	4
CRM498	<p>TUTORIAL: CRIMINOLOGY</p> <p>Tutorial: Criminology</p>	4
CRM499	<p>TUTORIAL: CRIMINOLOGY</p> <p>Tutorial: Criminology</p>	4

Course Code	Course Information	Credits
CSA210	<p>CHATHAM ABROAD: ASIA</p> <p>Chatham Abroad: Asia</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
CSA230	<p>CHATHAM ABROAD: EUROPE</p> <p>Study Abroad</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
CSA311	<p>CHATHAM ABROAD: ASIA</p> <p>Study abroad</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
CSA331	<p>CHATHAM ABROAD: EUROPE</p> <p>Study Abroad</p>	3
CSA341	<p>CHATHAM ABROAD: NORTH AMERICA</p> <p>Chatham Abroad: North America</p>	3
CST120	<p>INTRODUCTION TO JEWISH STUDIES</p> <p>Far from monolithic, the global Jewish experience has been one of multiculturalism, ethnic and linguistic diversity, adaptation, exile, and migration. This interdisciplinary course will consider the global Jewish experience from ancient times to the present day through a variety of lenses: Religion, diaspora, culture, language and literature, and self-representation.</p>	3

Course Code	Course Information	Credits
CST183	<p>REPRESENTATIONS OF RACE AND GENDER</p> <p>This course introduces students to the methodology of cultural studies. In this survey students learn those skills essential to analyzing social constructions of identity. Specific attention is paid to diverse texts, including film, in order to locate how representations of race, gender, ethnicity, and "otherness" are culturally produced and disseminated.</p>	3
CST204W	<p>EAST ASIAN STUDIES</p> <p>An exploration of East Asian geography, history, language, and culture from the Zhou Dynasty (ca. 1,000 BCE) to present times. Focus on China, Korea, Japan with reference to neighboring regions and discussion of Taiwan. Emphasis on arts, ideologies, and East Asian cultural sites in Pittsburgh area.</p>	3
CST213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
CST215	<p>PERSPECTIVES IN QUEER THEORY</p> <p>This course examines the cultural representations of lesbian, gay, bisexual, and transgender people in literature, film, history and social movements. We will explore how gender and sexual identities intersect with race, class and ethnicity. Finally, students will become conversant with the arguments and critical terms used in the field of queer theory.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	3
CST234	<p>ASIAN FOODWAYS</p> <p>A strategic survey of Japanese, Chinese/Taiwanese, Korean, and South Asian food ways in their originating contexts and the</p>	3

Course Code	Course Information	Credits
	U.S. Emphasis on anthropological understanding of food ways, cultural studies critique of class, gender, and family dynamics articulated via food, and historical transformations of food culture in response to migration and globalization.	
CST235	<p>EAST ASIAN CINEMA</p> <p>This course investigates the political-economic and ethical-aesthetic factors that have shaped cinematic expression in China, Japan, and Korea, starting in the 1930s but emphasizing the recent outpouring of widely acclaimed films in a variety of genres.</p>	3
CST342	<p>POST/MODERN CHINA: DIGITAL STORYTELLING</p> <p>An examination of Chinese cultural history from early 1900s to early 2000s, via literature and film, with training in digital storytelling techniques. Discussion of this dramatic national narrative framed by political and aesthetic considerations. Our interpretation and transmission of these narratives framed also by ethics and efficacy.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• ENG105 : First - Year Communication Seminar 	3
CST351	<p>ASIAN PACIFIC ISLANDER AMERICA: HISTORY AND CULTURE</p> <p>Study of diasporic waves arising in Vietnam, Nepal, India, China, Japan, Korea, etc., and flowing to the US (especially Western Pennsylvania) and elsewhere. Graphic novels, lyric tales, gender and class, emigrant-immigrant and rural-urban transitions, viewed from Cultural Studies and historical perspectives. Assignments include analyses, an interview, and a communication project.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> ENG105 : First-Year Writing 	
CST490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> ENG350W : Seminar in Literary Theory and Scholarly Writing 	3
CST498	<p>TUTORIAL: CULTURAL STUDIES</p> <p>Tutorial: Cultural Studies</p>	4
CST499	<p>TUTORIAL: CULTURAL STUDIES</p> <p>Tutorial: Cultural Studies</p>	4
DAN101	<p>THE WORLD OF DANCE</p> <p>This class explores the multitude of dance forms around the world via lectures, readings, films, and live performances. It approaches movement as a means of expressing the spirit and performing ritual, interacting socially and embodying cultural mores, and creating art. It looks at how new forms of dance are evolving as cultures fuse and technology opens up new venues.</p>	3

Course Code	Course Information	Credits
DAN121	<p>CONTEMPORARY DANCE TECHNIQUE I</p> <p>Students study basic dance movements through an exploration, analysis and identification of Contemporary Dance techniques built on foundational elements such as clear articulation of the spine, isolations, grounded movement, vocabulary and musicality. By using movement and knowledge of the body, students will learn to express themselves affectively and artistically.</p>	3
DAN125	<p>FOLK AND ETHNIC DANCE</p> <p>Folk and Ethnic dance will focus on the similarities and differences among the different International classical and folkdance systems. Through workshops students will learn basic dance steps as adaptation of motor skills, rhythmic perception and accuracy, musical phrasing and spatial awareness in both classical and folk ethnic forms.</p>	3
DAN160	<p>AFRICAN DANCE</p> <p>This introductory course immerses students in the many varieties and styles of African dance, while also attending to the ceremonial and ritual functions of dance in African culture. Various African historical and aesthetic perspectives will be introduced and studies through movement. Videotapes illustrating dance forms, and guest artists will also enhance this course.</p>	3
DAN213	<p>SPECIAL TOPICS:</p> <p>Special Topics course.</p>	3
DAN239	<p>DANCE PERFORMANCE</p> <p>This course is designed to refine the dancer's strength and style, enhance performance artistry, and acquire technical excellence through practical exercises and rehearsals in class.</p>	3

Course Code	Course Information	Credits
DAN305	<p>Students will learn correct body alignment and the principles of dance technique. Emphasis will be placed on movement phrasing, choreography, and performance.</p> <p>CHOREOGRAPHY</p> <p>Experiential exercises in traditional stage space are created by the student. Students experiment with time, rhythm, space, and effort through improvisation. Choreography in non-traditional spaces and electronic mediums are part of the course. Creating motifs, works in progress, and short choreographic pieces are part of the course experience.</p>	3
DAN313	<p>SPECIAL TOPICS</p> <p>This course in dance covers the techniques and historical significance associated with a specific style.</p>	3
DAN493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• XXX123 : Permission of Instructor 	3
DSA150	<p>INTRODUCTION TO DATA SCIENCE</p> <p>Data Science is the study of the tools and process used to extract knowledge from data. This course introduces students to this important, interdisciplinary field with applications in business, communications, healthcare, etc. Students learn the basics of data organization, packaging, and delivery. Simple algorithms and data mining techniques are introduced.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• CMP120 : Introduction to Programming <li>• CMP202 : Introduction to Programming 	3

Course Code	Course Information	Credits
DSA200	<p>DATA SCIENCE ETHICS</p> <p>In this course students learn about data science methods from a non-technical perspective and discuss cases that highlight ethical issues related to data science models, including inherent biases learned from training data, discrimination through proxy variables, lack of transparency, and issues related to privacy and data ownership.</p>	3
DSA250	<p>FUNDAMENTALS OF DATA SCIENCE</p> <p>In this course students learn the fundamentals of the data science process, including data acquisition, data cleaning and manipulation to prepare for analysis, common machine learning models for classification and regression, unsupervised machine learning models, and principles of model evaluation.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CMP120 : Introduction to Programming • MTH110 : Elementary Statistics 	3
DSA400	<p>DATA VISUALIZATION AND COMMUNICATION</p> <p>Cover the different ways of visualizing data, given different types and characteristics of data. Includes assessment and evaluation of existing data visualization techniques. Current tools used transform data and visualize data are reviewed, including Python, Google Charts, and/or Tableau.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CMP120 : Introduction to Programming • CMP202 : Introduction to Programming <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CMP283 : Database Management Systems • DSA150 : Introduction to Data Science 	3
DSA400W	DATA VISUALIZATION AND COMMUNICATION	3

Course Code	Course Information	Credits
	<p>Cover the different ways of visualizing data, given different types and characteristics of data. Includes assessment and evaluation of existing data visualization techniques. Current tools used transform data and visualize data are reviewed, including Python, Google Charts, and/or Tableau.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • CMP120 : Introduction to Programming • DSA250 : Fundamentals of Data Science 	
DSA411	<p>MACHINE LEARNING AND AI</p> <p>An introduction to machine learning and artificial intelligence. Topics include classification, regression, clustering, planning, and scheduling. Includes current issues relevant to big data problems.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • DSA250 : Fundamentals of Data Science 	3
DSA490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone is an extended project centered on a major; projects may include laboratory or fieldwork, creative work in the arts, advocacy work, or independent research; projects may be conducted in a group setting. Integrative capstones in the interdisciplinary major must be approved by both academic programs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BUS310W : Business Analytics: Research Methods • DSA250 : Fundamentals of Data Science 	3
DSA492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites:</p>	2

Course Code	Course Information	Credits
	Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
DSA493	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
ECN101	PRINCIPLES OF MACROECONOMICS The concepts of national income and output are analyzed, and emphasis is placed on factors that influence the levels of economic activity, unemployment, and inflation, including fiscal and monetary policy and the role of international economics.	3
ECN102	PRINCIPLES OF MICROECONOMICS Microeconomics is the study of how households and firms make decisions and how they interact in specific markets. Students are introduced to the basic concepts and tools that economists use to understand how the economy works. This course is designed to increase economic literacy through acquiring core knowledge about economics.	3
ECN262	GLOBAL ENVIRONMENTAL ECONOMICS This course examines the economic perspectives and tools for analyzing environmental problems and evaluating policy solutions. The course covers both conceptual topics and real-world applications. Course discussions reflect the global nature of environmental problems and solutions. Cross-listed as ENV 262. This course fulfills an environmental general education mission course requirement. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • ECN102 : Principles of Microeconomics 	3

Course Code	Course Information	Credits
ECN330	<p>GLOBAL FINANCIAL SYSTEM AND THE MACRO ECONOMY</p> <p>Combines material on economic analysis of the macro economy with a review of the global financial system. Develops analytical models on how to attain economic growth, price stability, and full employment. Covers the financial system, financial crises, and monetary policy. Emphasizes both analytical models and real world policy applications.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ECN101 : Principles of Macroeconomics • ECN102 : Principles of Microeconomics 	3
ECN331	<p>MANAGERIAL ECONOMICS</p> <p>This course covers the application of intermediate microeconomic analysis to business decision making. It is designed to bridge economic theory and economic practice. Topics include consumer theory, production analysis, pricing strategy, and risk analysis.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 : Principles of Microeconomics 	3
ECN351	<p>INTERNATIONAL TRADE AND FINANCE</p> <p>An introduction to international trade and finance, and an examination of the structure of international trade and the functioning of the international monetary system. Attention is given to recent issues in these areas and the relationship between the domestic and international economies.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ECN101 : Principles of Macroeconomics • ECN102 : Principles of Microeconomics 	3

Course Code	Course Information	Credits
ECN355	ECONOMIC ANALYSIS OF PUBLIC POLICY	3
	<p>This course focuses on evaluating the rationale for government intervention in the economy and evaluating the efficiency, incentive, and distributional effects of government policies. Policies' impacts on issues such as how best to protect intellectual property, improve airline safety or control illegal immigration are also analyzed.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ECN102 : Principles of Microeconomics 	
ECN358W	ECONOMIC DEVELOPMENT	3
	<p>An examination of the factors accounting for economic growth and development of modern economically developed nations and less-developed areas. A review of the problems encountered in initiating and sustaining the process of economic development. Major policy issues are discussed. This course fulfills a global general education mission course requirement.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ECN101 : Principles of Macroeconomics • ECN102 : Principles of Microeconomics 	
ECN490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of</p>	

Course Code	Course Information	Credits
	<p>both academic programs.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BUS310W : Business Analytics: Research Methods • BUS312W : Marketing Research 	
ECN498	<p>TUTORIAL: ECONOMICS</p> <p>Tutorial: Economics</p>	4
ECN499	<p>TUTORIAL: ECONOMICS</p> <p>Tutorial: Economics</p>	4
EDC107	<p>FIELD PLACEMENT I</p> <p>This field experience is designed to familiarize pre-service teachers with the development of children in school settings. Through observation, guided practice and reflective journaling, this placement allows the pre-service teacher to strengthen observation and planning skills, to observe the physical, emotional and cognitive growth of children and to become familiar with classroom practices while working with a host teacher.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • EDC105 : Child Development: Birth through grade 4 	1
EDC200	<p>FIELD PLACEMENT: LEARNING THEORY</p> <p>This field experience is designed to familiarize pre-service teachers with the cognitive development of children in school settings. Through observations, guided practice and reflective journaling, this placement allows the pre-service teacher to strengthen observation and planning skills, to observe the cognitive growth of children and to become familiar with classroom practices while working with a host teacher.</p>	1

Course Code	Course Information	Credits
EDC250	<p>FIELD PLACEMENT III</p> <p>This field experience is designed to familiarize pre-service teachers with the inclusion practices and early interventions in school settings. Through observation , guided practice and reflective journaling, this placement allows the pre-service teacher to strengthen observation to observe the cognitive challenges of some children and to become familiar with classroom practices to accommodate these children.</p>	1
EDC350	<p>FIELD PLACEMENT V: INSTRUCTIONAL STRATEGIES II</p> <p>Students work with host classroom teachers at two different levels (preK and 2nd or 3rd grade). Students assume a greater role in teaching students through small group activities and whole class activities with a focus on mathematics and social studies. Practice and comparisons of a variety of teaching methods are part of the experience. Students submit lesson plans, host teacher reviews, as well as a reflective journal and summary essay.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> <li>• EDC319 : Elementary Social Studies Methods <li>• EDU335 : Methods of Teaching Elementary Mathematics 	1
EDU104	<p>PERSPECTIVES ON EDUCATION</p> <p>Students examine the role of teachers and schools in past and contemporary society. Selected educational issues are analyzed including role of technology in the classroom, legal issues for teachers, school-community relations, and current legislative initiatives. A 16 hour field placement is embedded in this course. Additional Fee(s): Field Placement Fee</p>	3
EDU105	<p>CHILD DEVELOPMENT: BIRTH THROUGH GRADE 4</p> <p>This course addresses physical, social, cognitive, and moral development from prenatal stages through middle childhood.</p>	3

Course Code	Course Information	Credits
EDU108	<p>Students examine child development in the context of social, cultural, instructional settings. Using case studies, the implications of growth and development on instructional planning for effective learning is achieved. Students learn to create environments that are healthy, respectful, supportive and challenging for all children.</p> <p>PLAY AND MOVEMENT</p> <p>A range of games and activities are explored in terms of functional movements and progression towards mature forms of selected physical skills. Healthy warm-up and participation strategies will be part of the exploration of each game. Games will be analyzed in terms of developmental appropriateness and the involvement of certain muscle groups and skill requirements. Students design an original game targeting the development of age-specific skills.</p>	1
EDU205	<p>ELL TEACHING STRATEGIES FOR CLASSROOM TEACHERS</p> <p>This course explores how effective language development results in children who successfully learn to read and can use reading effectively in academic subject areas and to negotiate the world. A major focus of this course is on information and methods for enhancing the literacy and academic experiences of students in grades K-12 classified as English as second language (ELL) students.</p>	3
EDU207	<p>TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION</p> <p>Students in this course will examine current and contemporary issues surrounding early childhood education. Class discussions focus on sociological, psychological, political, and economic forces shaping families, children and early educational experiences. Students will explore the connection between curriculum and physical environment. Major</p>	3

Course Code	Course Information	Credits
	approaches and theories in early childhood curriculum are explored in terms of the cognitive, social and physical dimensions. Emphasis is placed on the physical expression of early childhood learning theory. Issues of health and safety, including state and federal regulations are also explored.	
EDU214	SPECIAL TOPICS Special Topics	3
EDU219W	COGNITIVE LEARNING THEORIES This course addresses brain and cognitive development from prenatal stages through middle childhood. Students examine child development in the context of learning theories. The implications of physical and social growth and development on instructional planning for effective learning are explored. A field experience where theories and concepts can be observed is part of this course and serves to inform classroom discussion and activities.	3
EDU227	LITERACY This course is designed to equip graduating teachers to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world through the presentation of theory, research and practical strategies associated with the teaching of literacy skills. For the purposes of this course, literacy will be defined as one's ability to use language in order to listen, speak, read and write across the curriculum.	3
EDU230	MATHEMATICAL FOUNDATIONS This course relates the principles and process skills of basic mathematics to effective teaching with the best practices in the classroom. Concrete experiences with manipulatives and hands-on learning are an important piece in this course. In this	3

Course Code	Course Information	Credits
	<p>course, students will acquire the skills necessary for informed decision-making in planning, facilitation of learning based on knowledge or research, best practices, state and national performances standards, and assessments.</p>	
EDU234	<p>INCLUSION: ISSUES AND STRATEGIES</p> <p>This course provides the conceptual framework for understanding inclusion issues in our public schools. The students discuss the variety of exceptionalities found in public school settings and the resultant impact of inclusion policy upon instructional practice. A field placement is embedded in this course. Additional Fee: Field Placement Fee.</p>	3
EDU240	<p>INTEGRATING THE ARTS</p> <p>This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of other subjects in the elementary curriculum. Students examine national and PA Academic Standards of the Arts and Humanities in Art, Music, Theater, and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.</p>	3
EDU241	<p>PEDAGOGICAL PRACTICES</p> <p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is explored throughout the course.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • EDC104 : Contemporary Education and Technology • EDU104 : Perspectives on Education 	
EDU301	<p>EDEN HALL EXPERIENCE - EXPERIENTIAL LEARNING AND</p> <p>This course covers strategies for experiential learning and for creating meaningful K-12 classroom experiences through community partnerships, field trips and projects. The class explores the following concepts and more: project based learning, place based learning, design challenge learning, maker spaces, adventure/outdoor education, environmental education.</p>	1
EDU319	<p>METHODS OF TEACHING ELEMENTARY SOCIAL STUDIES</p> <p>This course is a study of the resources and methods of teaching elementary social studies including geography and culture. Links to literature and the fine arts are part of this exploration of a thematic integration of social studies in classroom activities. A structured field experience is part of this course.</p>	3
EDU323	<p>EDUCATIONAL RESEARCH METHODS</p> <p>This course focuses on basic research methodology in preparation for the senior tutorial project. It provides a general approach for conducting any basic research project. Through a series of readings and meetings with an education program faculty member, the student will explore the various types of educational research, select and define a research question and complete a literature review. The student will also create an outline for the research paper including the appropriate statistical measures. Tutorial guidelines and Institutional Review processes will be reviewed. Students will meet with the faculty mentor, both in person and online.</p>	3

Course Code	Course Information	Credits
EDU323W	EDUCATIONAL RESEARCH METHODS <p>This course focuses on basic research methodology in preparation for the senior tutorial project. It provides a general approach for conducting any basic research project. Through a series of readings and meetings with an education program faculty member, the student will explore the various types of educational research, select and define a research question and complete a literature review. The student will also create an outline for the research paper including the appropriate statistical measures. Tutorial guidelines and Institutional Review processes will be reviewed. Students will meet with the faculty mentor, both in person and online.</p>	3
EDU328	LITERACY II: CONNECTIONS TO LITERATURE <p>This course provides a foundation for selecting age, development, and cultural-appropriate literature that engages children and provides links to reading and writing in content areas. Students evaluate authors, illustrators, and study the various types of literature common to early elementary experiences that develop their emotional, social, language, cognitive, and creative talents.</p>	3
EDU335	METHODS OF TEACHING ELEMENTARY MATHEMATICS <p>This course is designed to examine and explore recent research developments related to national efforts to reform the teaching and learning of mathematics. Students explore the teaching of mathematics in grades K-8 within the context of child development and learning theory. Research-based curriculum projects are explored in terms of their ability to promote deep conceptual understanding in mathematics. Considerations involved in examining or developing assessment tasks, instruments, and frameworks are addressed in relation to the content taught. Emphasis also is placed on reviewing specific content topics in math to increase the</p>	3

Course Code	Course Information	Credits
	student's won competencies in these disciplines.	
EDU336	<p>METHODS OF TEACHING ELEMENTARY SCIENCE</p> <p>This course presents concepts, processes, and skills essential to the elementary school science program. The standards set by the National Science Teachers Association serve as a framework for the course. Inquiry teaching and learning are experienced through research-based national programs.</p>	3
EDU340	<p>EDUCATION FOR SUSTAINABILITY</p> <p>Students will learn how to promote collective problem-solving skills in K12 classrooms to address critical environmental, economic, and social issues. Connections between sustainability, poverty, and equity issues will be highlighted. This course will include a multi-week field experience in Costa Rica plus on the ground meetings before and after.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• EDU104 : Perspectives on Education 	3
EDU400	<p>DATA DRIVEN INSTRUCTION DECISIONS</p> <p>The importance of making decisions based on actual data collected on students now plays a major role in all schools. The data that needs to be reviewed goes beyond standardized test results and needs to include both summative and formative assessment results. The connection between the curriculum and the assessments utilized to assess a student's progress along the curriculum needs to be viewed as a guide to effective educational decision making. Students entering the educational profession need a background in types of assessments and how data collected from such assessments can meet the needs of students in the context of the curriculum.</p>	2
EDU409	DIFFERENTIATED READING AND WRITING	3

Course Code	Course Information	Credits
EDU411	<p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing to students with disabilities. Strategies to develop conceptual understanding in the content areas are equally important for the beginning and more accomplished learner. Projects include developing lessons that differentiate instructional practice and assessment to help all students achieve.</p> <p>This course will explore both the theoretical framework and the practical strategies that teachers will utilize as they design learning situations to meet these challenges. Students will learn and apply a variety of techniques for designing lesson and unit plans, integrating curriculum across subject areas, addressing state standards, authentically assessing children, implementing positive classroom management strategies and involving parents in the classroom. Particular attention will be given to the topic of differentiation and the exploration of instructional strategies.</p>	3
EDU415	<p>Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • EDU104 : Perspectives on Education 	3
EDU416	<p>This course addresses the theory and philosophy of teaching</p>	3

Course Code	Course Information	Credits
	<p>language arts in middle and secondary schools. Classroom teaching strategies are explored and implemented in class presentations and in grades 7-12 public classrooms. Students plan instructional situations that clearly express the reading-writing connection that exists in effective language arts programs. FP Embedded: 16 hours</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • EDU100 : Introduction to Field Experience • EDU102 : Principles of Teaching and Learning • EDU104 : Perspectives on Education 	
EDU417	<p>METHODS OF TEACHING SECONDARY SOCIAL STUDIES</p> <p>This course intends to develop teaching/learning styles that research has shown are most effective for teaching social studies to adolescents. Contextual teaching, problem based learning and critical thinking are approached through instructional strategies that combine investigative classroom inquiry with both national and state content standards. Students learn to frame issues, help students research and analyze data and information and to construct meaning and understanding.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • EDU100 : Introduction to Field Experience • EDU102 : Principles of Teaching and Learning • EDU104 : Perspectives on Education 	3
EDU418	<p>METHODS OF TEACHING SECONDARY SCIENCE</p> <p>Examination of current theory and practice for teaching science in secondary schools is explored in this course. Curriculum development, teaching strategies and methodologies, and assessment issues are also addressed. Students examine research-based curriculum and inquiry teaching and learning as best practices in science education.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete all 3 of the following courses: <ul style="list-style-type: none"> • EDU100 : Introduction to Field Experience • EDU102 : Principles of Teaching and Learning • EDU104 : Perspectives on Education 	
EDU419	METHODS OF TEACHING SECONDARY MATHEMATICS A balance of theory and practice is explored in this course to help students become effective teachers of mathematics. Curriculum development, teaching strategies and methodologies, and assessment issues are also addressed. Students examine research-based curriculum and inquiry teaching and learning as best practices in science education. Pre-Requisites: Complete all 3 of the following courses: <ul style="list-style-type: none"> • EDU100 : Introduction to Field Experience • EDU102 : Principles of Teaching and Learning • EDU104 : Perspectives on Education 	3
EDU422	PRE-STUDENT TEACHING In this two-day/week field experience, the pre-service teacher gains experiences that will allow him/her to practice, develop, and demonstrate Pennsylvania Department of Education (PDE) Stage Three competencies through meaningful interactions with students and qualified mentors. Candidates are provided with frequent supervision in a collaborative school-university partnership with a local district. An approved application to Pre-Student Teaching that includes designated number of credits, GPA, and appropriate clearances is required.	3
EDU423	STUDENT TEACHING Student Teaching	9
EDU430	DIVERSE FAMILY AND COMMUNITY PARTNERSHIPS Advocates, educators, and parents have called for more and	3

Course Code	Course Information	Credits
	<p>better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnership.</p>	
EDU431	<p>ASSESSMENT AND ADAPTATION</p> <p>Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.</p>	3
EDU432	<p>HUMAN GEOGRAPHY</p> <p>The course provides a review of the interaction between diversity of culture and the impact of geography. Economics, government, social structure, and cultural diversity are all reviewed as they developed over time and in the context of the contemporary world.</p>	3
EDU437	<p>METHODS OF TEACHING ELEMENTARY ART</p> <p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to elementary school children. This course contains an embedded field experience of 16 hours in an elementary art classroom. Additional Fee: Field Placement Fee</p>	3
EDU447	<p>METHODS OF TEACHING SECONDARY ART</p> <p>Students approach the teaching of art consistent with national</p>	3

Course Code	Course Information	Credits
	standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to secondary students. Students work with host classroom teachers at two different schools or two different levels (middle and high school). Corequisite: EDU415.	
EDU448	TEACHING THE HOLOCAUST	3
	<p>A study of the Holocaust is not only a study of Jewish history, but of human history, and how humanity can collectively learn from our greatest mistakes. This course will offer best-practices in Holocaust education with a focus on L.I.G.H.T. - Leadership through Innovation in Genocide and Human rights Teaching.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • HIS224 : The Holocaust: Nazis, Occupied Europe, The Jews 	
EDU460	NON-LICENSURE PRACTICUM IN EDUCATION	9
	<p>This 140-hour practicum and weekly seminar is designed for students not seeking teaching certification in Pennsylvania. This course is to prepare students for professional practice in educational related settings and students will create documents or projects that ask them to reflect on the development of their own professional competencies.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU411 : Early Elementary Curriculum 	
EDU490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to</p>	

Course Code	Course Information	Credits
	<p>meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU323W : Educational Research Methods 	
EDU492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
EDU493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
EDU498	<p>TUTORIAL: EDUCATION</p> <p>Tutorial: Education</p>	4
EDU499	<p>TUTORIAL: EDUCATION</p> <p>Tutorial: Education</p>	4
EDU502	<p>PERSPECTIVES ON EDUCATION</p> <p>This course examines the influences that have resulted in the unique role of the teacher and school in our society in the past as well as the present. Topics include needs of exceptional children, the role of technology in education, and school-community relations. Students are required to complete a major</p>	2

Course Code	Course Information	Credits
	<p>research project that addresses a current educational issue. Co-Requisite: EDU580</p>	
EDU503	<p>YOUNG ADOLESCENT LITERATURE</p> <p>In this course students explore and develop in-depth knowledge of children's literature and its integration into the early childhood or elementary curricula. Students are required to complete a major project using technology and the arts that reflects effective pedagogy.</p>	2
EDU505	<p>ISSUES OF POVERTY IN EDUCATION</p> <p>This course focuses on the characteristics and effects of poverty on education. Definitions and types of poverty are examined. The impact of poverty on cognitive and physical development as well as learning and behavior on individuals is examined. The influences of poverty on classroom and schools is assessed. Strategies to teach students of poverty and combat poverty in schools are discussed.</p>	3
EDU508	<p>GAMES CHILDREN PLAY</p> <p>A range of games and activities are explored in terms of functional movements and progression towards mature forms of selected physical skills. Healthy warm-up and participation strategies will be part of the exploration of each game. Games will be analyzed in terms of developmental appropriateness and the involvement of certain muscle groups and skill requirements. Students design an original game targeting the development of age-specific skills.</p>	1
EDU509	<p>TRENDS AND ISSUES IN EARLY CHILDHOOD EDUCATION</p> <p>Trends and Issues in Early Childhood Education</p>	3

Course Code	Course Information	Credits
EDU510	<p>DIFFERENTIATED READING AND WRITING</p> <p>This course provides the regular and special education teacher with specific data-based knowledge and skills to teach reading and writing in content areas to students with disabilities.</p>	3
EDU511	<p>EARLY ELEMENTARY CURRICULUM</p> <p>Students explore the teaching of all content areas in the early childhood setting. Students experience using a computer as a teaching tool, and examine and evaluate instructional software. A capstone research paper or project will demonstrate theory-based best practices to develop a curriculum for use in the early childhood classroom.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education • EDU607 : Child Development and Learning Theory • EDU609 : Literacy <p>Co-Requisites:</p>	3
EDU513	<p>EDUCATION FOR SUSTAINABILITY</p> <p>Participants are introduced to foundational understandings of sustainability and how to promote a mindset that supports sustainability in a K12 setting. Connections between sustainability, poverty, and equity issues are highlighted.</p>	1
EDU514	<p>DATA DRIVEN INSTRUCTIONAL DECISIONS</p> <p>The importance of making decisions based on actual data collected on students now plays a major role in all schools. Data review goes beyond standardized test results and includes summative and formative assessment results. The connection between curriculum and assessments assessing a student's progress needs to be viewed as a guide to effective educational decision making.</p>	2

Course Code	Course Information	Credits
EDU515	<p>SECONDARY SCHOOL CURRICULUM</p> <p>Students investigate instructional planning and implementation as well as a range of behavior and classroom management techniques. Reading assignments in appropriate professional literature encourage students to develop a familiarity with the most effective teaching approaches. Motivation, evaluation of student achievement, and differentiation of instruction are considered.</p>	3
EDU516	<p>METHODS OF TEACHING SECONDARY ENGLISH</p> <p>This course addresses the theory and philosophy of teaching language arts in middle and secondary schools. Classroom teaching strategies are explored and implemented in class presentation and in 7-12 public classrooms. Students plan instructional situations that clearly express the reading-writing connection that exists in effective language arts programs. Co-Requisites: EDU515 and EDU581</p>	3
EDU517	<p>TEACHING METHODS IN SECONDARY SOCIAL STUDIES</p> <p>This course develops research-based strategies for teaching social studies. Contextual teaching, problem-based learning, and critical thinking are approached through instructional strategies that combine investigative classroom inquiry with both national and state context standards. Students learn to frame issues, help students research and analyze data and information to construct meaning and understanding. Co-Requisites: EDU515 and EDU581</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> <li>• EDU515 : Secondary School Curriculum <li>• EDU581 : Pedagogical Practices 	3
EDU518	<p>METHODS OF TEACHING SECONDARY SCIENCE</p> <p>Examination of current theory and practice for teaching science</p>	3

Course Code	Course Information	Credits
	<p>in secondary schools is explored in this course. Curriculum development, teaching strategies and methodologies, and assessment issues are also addressed. Students examine research-based curriculum and inquiry teaching and learning as best practices in science education. Co-Requisites: EDU515 and EDU581</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • EDU515 : Secondary School Curriculum • EDU581 : Pedagogical Practices 	
EDU524	<p>TEACHING IN A URBAN SCHOOLS</p> <p>This course helps future teachers understand the complexities of teaching in a culturally diverse classroom. Students learn how to work effectively with students from various socioeconomic, religious, ethnic, and cultural groups. Students complete a major research project reflecting an understanding of best practices in effectively developing multicultural learning communities.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education 	2
EDU526	<p>INTEGRATED HUMANITIES METHODS</p> <p>This course addresses theory and practice in teaching secondary school students to read and communicate effectively in the content area. The course provides strategies for teaching reading, listening, speaking, and writing in the secondary classroom. A research paper or project demonstrating mastery of content area literacy is required.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education 	2
EDU528	<p>INTEGRATED MATH AND SCIENCE METHODS</p>	2

Course Code	Course Information	Credits
EDU530	<p>The purpose of this course is to provide pre-service teachers with experiences, understanding, and methods that they will be able to use in middle level mathematics and science classrooms. Students in this course will build an understanding of the relevant standards, instructional methods, and resources available for the middle level mathematics and science class.</p> <p>Advocates, educators, and parents have called for more and better family-school partnerships for decades. Recently, a body of empirical evidence has indicated that partnerships can have a positive impact. A number of studies highlight the positive associations between parent involvement in schools and their children's social and emotional development and academic achievement. This course explores the form and focus of several types of partnerships. Must be taken with student teaching.</p>	3
EDU531	<p>Students investigate the assessment of individuals with mild to moderate disabilities. Topics include the fundamental principles of assessment tools and the social responsibility of professionals to exercise fairness and accuracy in the assessment process.</p>	3
EDU534	<p>This course is designed to provide students with the knowledge and tools needed to be effective elementary social studies teachers. Students will learn strategies that allow for diverse learners to "experience" social studies, and to integrate social studies with all other subject areas. In this course, together we will attempt to establish a "social curriculum" that starts with the social studies, includes all academic areas, and expands into the halls, the playground, and into the world.</p>	2

Course Code	Course Information	Credits
EDU535	<p>METHODS OF TEACHING ELEMENTARY MATHEMATICS</p> <p>This course explores recent research developments of national reform efforts in teaching mathematics. Students explore the teaching of mathematics within the context of child development and learning theory. Research-based curriculum projects promote deep conceptual understanding in mathematics. Review of specific topics in math to increase the student's own competencies is included.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education • EDU607 : Child Development and Learning Theory 	3
EDU536	<p>METHODS OF TEACHING ELEMENTARY SCIENCE</p> <p>This course explores recent developments of national reform efforts in teaching science based on developmental and learning theory. Students will learn hands-on innovative classroom practices and review national and state standards for science education. Methods for increasing content knowledge related to schedule and technology will be explored.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education 	2
EDU537	<p>METHODS OF TEACHING ELEMENTARY ART</p> <p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course combines theory, research and practical knowledge about teaching art as a universal language and creative experience to elementary school children. This course contains an embedded field experience of 16 hours in an elementary art classroom.</p>	3

Course Code	Course Information	Credits
EDU547	METHODS OF TEACHING SECONDARY ART	3
	<p>Students approach the teaching of art consistent with national standards of pedagogy and art. This course approaches the teaching of art in the secondary school as a means of exploring the meaning and relevance of art to humanity. This course explores methods for engaging students in art experiences through a variety of teaching. This course contains an embedded field experience of 16 hours in a secondary art classroom.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education 	
EDU580	SUPERVISED FIELD III EXPERIENCE	0
	<p>This field placement offers the student the opportunity to experience and assess the culture of a school. Daily interactions among teachers, students, administration, and support staff in a unique physical setting provide the pre-service teacher with a comprehensive overview of school life.</p>	
EDU581	PEDAGOGICAL PRACTICES	1
	<p>This course focuses on the characteristics of effective teaching practices and examines different ways that effective teachers help students learn. The impact of standards and accountability on lesson planning, implementing instruction and assessment is examined. How student diversity influences classroom practices is examined through case studies and discussion topics. The use of technology to create lesson focus, increase student involvement and to organize lesson content is a theme that is experienced throughout the course.</p>	
EDU583	CONFLICT RESOLUTION	1
	<p>This course teaches students how to avoid conflicts from developing and explores methods to resolve conflict. This</p>	

Course Code	Course Information	Credits
	<p>course also defines and presents a mediation process that employs a specific set of techniques that enables students to peacefully resolve conflict. Students taking this course will learn to manage conflict in their personal life, classroom, and in the workplace.</p>	
EDU591	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
EDU592	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
EDU593	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
EDU605	<p>INSTRUCTING STUDENTS WITH AUTISM SPECTRUM DISORDERS</p> <p>This course is designed to focus on pertinent issues and topics that concern students with autism. Spectrum disorders. This course provides an overview of evidenced-based instructional strategies used to teach students with autism as well as ways to collaborate with individuals in the home, school, and community. Topics will cover specific instructional strategies, family/community relations, behavior, inclusion and transition.</p>	3

Course Code	Course Information	Credits
EDU606	<p>ADOLESCENT DEVELOPMENT AND LEARNING THEORY</p> <p>This course addresses physical, social, cognitive, and moral development during adolescence. The physical, social, and cognitive changes during puberty are explored in terms of their impact on student participation and performance in school settings. Through the use of case studies, an understanding of the implications of growth and development on instructional planning for effective learning is achieved.</p>	3
EDU607	<p>CHILD DEVELOPMENT AND LEARNING THEORY</p> <p>Focusing on child development from the prenatal stage to age 12, this course emphasizes current research on physical, cognitive, and social development. Students examine the nature of adolescent development, implications of the cognitive and affective characteristics of adolescents in the selection of instructional methods and materials, and structural and organizational features of typical high schools.</p>	3
EDU609	<p>LITERACY</p> <p>The interrelationships among listening, speaking, writing, and reading are investigated with a view toward emphasis on the impact that classroom organization, patterns, materials, and approaches have on teacher effectiveness in teaching elementary and early childhood-aged students, individually and in groups. Students are required to complete a major research paper or project in which they demonstrate knowledge of and skill in using teaching strategies that reinforce the theoretical considerations of the course.</p>	3
EDU618	<p>INSTRUCTIONAL COMPUTER INTEGRATION</p> <p>This course helps students develop competency integrating computer technology with the school curriculum. It provides a practical introduction to using computers to help students learn</p>	2

Course Code	Course Information	Credits
	<p>emerging instructional technologies. Special emphasis is on the process and products available through computer technology and educational media. Students prepare an instructional unit integrating a variety of technologies.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU502 : Perspectives on Education 	
EDU629	<p>SCHOOL LAW</p> <p>The focus of this course is to explore the interaction between law and educational practice and their continuing development under the press of changing societal demands. The course provides educators with information and insights to enable them to address potential legal problems using sound judgment.</p>	3
EDU634	<p>INCLUSION: ISSUES AND STRATEGIES</p> <p>This course surveys practices of inclusion in education. It encompasses the historical precedents, underlying philosophy, education theory, instructional strategies, and practical implications of it implementation. Students participate in a variety of learning experiences throughout the course.</p>	3
EDU639	<p>INTEGRATING THE ARTS</p> <p>This interdisciplinary course provides the basic understanding of the use of art, music, movement, and creative dramatics in an early childhood setting. It is designed to enhance the student's mastery of content areas in the elementary curriculum. Students examine national and the PA Academic Standards for the Arts and Humanities in Art, Music, Theater and Dance; and learn how to integrate these standards into interdisciplinary lessons in literacy, mathematics, science and history for students pre-Kindergarten through fourth grade.</p>	3
EDU657	<p>ELL TEACHING STRATEGIES FOR CLASSROOM</p>	3

Course Code	Course Information	Credits
	<p>TEACHERS</p> <p>This course explores language development for English Language Learners for whom English is a second language. Pre-service teachers acquire knowledge and skills required to meet the educational needs of ELLs in their future classrooms. The course also addresses the legal responsibilities to English Language Learners under Pennsylvania and federal laws and regulations.</p>	
EDU661	<p>HIGH INCIDENCE DISABILITIES: INSTRUCTIONAL STRATEGIES BIRTH-GRADE 8</p> <p>This course focuses on the design and implementation of an individualized education program for a child with mild learning needs and the selection, design, and adaptation of curriculum and instructional techniques in the areas of reading, language arts, and mathematics.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • EDU506 : Issues in Special Education 	3
EDU662	<p>ADVANCED INSTRUCTIONAL INTERVENTIONS 7-12</p> <p>This course provides an advanced application of recent research and reviews of interventions for individuals with high incidence disabilities in the 7-12 grades. Topics will include: recent research on interventions in reading, writing and math, effective instructional practices, learning strategies, reading, writing and math instructional strategies, content area accommodations, testing accommodations and transition.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • EDU510 : Differentiated Reading and Writing 	3
EDU664	<p>BEHAVIOR MANAGEMENT IN THE CLASSROOM</p> <p>Students investigate the principles and systematic approaches</p>	3

Course Code	Course Information	Credits
	used to identify and analyze problem management techniques, individual behavior and affective intervention strategies, and community-based support programs designed to address problem behaviors. Crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors.	
EDU668	<p>LOW INCIDENCE DISABILITIES: BIRTH-8TH GRADE</p> <p>This course focuses on the design of a comprehensive educational program for students having low incidence disabilities in PREK-8. Teacher Candidates are exposed to the curriculum of students with low incidence disabilities, define various low-incidence disabilities, as well as develop and implement lesson plans, curriculum and assistive technologies.</p>	3
EDU669	<p>LOW INCIDENCE DISABILITIES 7-12</p> <p>This course focuses on the design of a comprehensive educational program for students having low incidence disabilities in 7-12. Teacher/Teacher candidates will be exposed to the curriculum of students with low incidence disabilities such as life, vocational, and social skills, and functional academics. In addition, student will be able to identify and define various low-incidence disabilities as well as develop and implement lesson plans, curriculum and assistive technologies. Student will learn how to consult and research available journals and resources for teaching students with low-incidence disabilities. * This course requires an embedded 10 hours of field placement. Students must have valid federal FBI, PA Criminal and PA Child Abuse clearances to complete the field placement.</p>	3
EDU671	<p>COLLABORATION, CONSULTATION, AND TEAMWORK</p> <p>This course focuses on developing effective collaboration skills with members of the school community, as well as the community at large, to provide a realistic and integrated program for all children. Students engage in a variety of group</p>	3

Course Code	Course Information	Credits
	activities that call for the need to analyze group dynamics and implement effective communication strategies.	
EDU673	INSTRUCTIONAL PERSONALIZATION AND TRANSITION This course focuses on the transition of special needs students throughout their school programming. The following topics are examined: parent's needs and methods of collaborating, Early Childhood Intervention, Inclusion, Sexuality and Transition to Adult Life.	2
EDU690	PRACTICUM IN SPECIAL EDUCATION This course is designed for students who hold a Pennsylvania certification and are seeking certification in special education. Students demonstrate their ability to plan for and deliver a minimum of 15 lessons to special needs students enrolled in regular education or resource rooms. Pre-Requisites: Complete all 3 of the following courses: <ul style="list-style-type: none"> • EDU524 : Teaching in a Urban Schools • EDU668 : Low Incidence Disabilities: Birth-8th Grade • EDU673 : Instructional Personalization and Transition 	6
EDU694	STUDENT TEACHING FOR THE URBAN FELLOW During the 14 week pre-K-6 placement, student teachers will plan and implement lesson and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college supervisor. Students develop a portfolio based on the PDE Form 430 to document their competencies for certification.	3
EDU696	STUDENT TEACHING During one 8 week elementary and one 8 week secondary placement, student teachers will plan and implement lessons,	9

Course Code	Course Information	Credits
	and assume other appropriate instructional responsibilities under the guidance of an experienced teacher and a college professor. Students develop a portfolio based on the PDE form 430 to document their competencies for certification. Prerequisites: Completion of all program requirements.	
ELI031	BASIC READING Basic Reading	3
ELI032	BASIC GRAMMAR Basic Grammar	3
ELI033	BASIC LISTENING/SPEAKING Basic Listening/Speaking	3
ELI034	BASIC WRITING This basic level writing course focuses on developing learners' abilities to write sentences and series of sentences about topics of immediate relevance linked with simple connectors like 'and', 'but' and 'because'.	3
ELI071	FOCUS ON LISTENING/SPEAKING Focus on Listening/Speaking	3
ELI073	FOCUS ON READING Focus on Reading	3
ELI075	FOCUS ON WRITING Focus on Writing	3

Course Code	Course Information	Credits
ELI077	<p>FOCUS ON GRAMMAR</p> <p>Focus on Grammar</p>	2
ELI081	<p>LISTENING/SPEAKING I</p> <p>This course focuses on improving students listening comprehension and oral expression in English. Students will work on improving conversational skills and participation in classroom discussion.</p>	3
ELI082	<p>SPEAKING/LISTENING II</p> <p>Speaking/Listening II</p>	3
ELI083	<p>GRAMMAR I</p> <p>This course focuses on improving students' awareness of English grammar. Grammar structures will be taught through a variety of mediums including reading, writing, and listening activities.</p>	3
ELI084	<p>GRAMMAR II</p> <p>Grammar II was developed for intermediate-level language learners to raise learners' awareness of the differences between the grammar of written English and that of spoken English and improve learners' accuracy in their speaking and writing. Grammatical elements are integrated into topical reading, listening, speaking, and writing assignments, and students learn to identify, analyze, and apply new sentence structures. By the end of the course, students will have the skills to comprehend more sophisticated texts and to communicate in speaking and writing with increasing levels of accuracy.</p>	3
ELI085	<p>READING I</p>	3

Course Code	Course Information	Credits
	This course focuses on improving reading skills and focuses on fluency and comprehension. Students will read academic articles as well as longer extensive readings. Vocabulary acquisition is also stressed.	
ELI086	READING II Reading II	3
ELI087	WRITING I This course will focus on improving students' written expression in English. Students will be able to write a well-organized and coherent paragraph with minimal grammatical errors.	3
ELI088	WRITING II Writing II	3
ELI090	AMERICAN CULTURE AND CINEMA American Culture and Cinema	3
ELI091	US CULTURE I US Culture I	3
ELI092	COMMUNICATION FOR SUCCESS Communication for Success	3
ELI094	WRITING FOR SUCCESS Writing for Success	3

Course Code	Course Information	Credits
ELI101	<p>ACADEMIC READING</p> <p>This course offers advanced instruction in college-level reading on a variety of topics that students will encounter in their academic experience. Acquisition of academic vocabulary is also stressed.</p>	3
ELI102	<p>ACADEMIC WRITING</p> <p>Most international students have had no previous interaction in writing academic English and are not aware that the rhetorical patterns of English are different from those used by their native languages. Thus, the primary focus of this course is on the American English rhetoric necessary for presenting written arguments in a logical, coherent manner. Students write short papers (for their academic classes, if possible), demonstrating their mastery of the forms. The second focus is on the form and mechanics of writing a research paper. Using library facilities, students learn the various types of materials and ways of researching a topic.</p>	3
ELI104	<p>ACADEMIC COMPOSITION</p> <p>Academic Composition</p>	3
ELI106	<p>CLASSROOM INTERACTION</p> <p>This course focuses on improving students listening comprehension and oral expression in English. Students will work on improving conversational skills and participation in classroom discussion.</p>	3
ELI107	<p>ADVANCED COLLEGE READINGS</p> <p>Advanced College Readings</p>	3
ELI108	<p>ACADEMIC COMMUNICATION SKILLS</p>	3

Course Code	Course Information	Credits
	Academic Communication Skills	
ELI193	US CULTURE - PITTSBURGH US Culture - Pittsburgh	3
ELI501	GRADUATE ACADEMIC DISCOURSE Graduate Academic Discourse	3
ELI503	GRADUATE WRITING Graduate Writing	3
ELP011	BASIC LISTENING/SPEAKING A This basic level course focuses on developing learners' abilities to communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters and describe in very simple terms aspects of his/her background, immediate environment, and matters in areas of immediate need.	2
ELP012	BASIC READING A This basic level reading course continues to develop students' abilities to read simple texts on a variety of familiar topics.	2
ELP013	BASIC WRITING A This basic level writing course aims to develop the students' abilities to write comprehensible sentences on familiar topics.	2
ELP014	BASIC GRAMMAR A This basic level grammar course provides explicit instruction	1

Course Code	Course Information	Credits
	and practice of basic grammatical elements and structures including nouns and adverbs, tenses, and time and reason clauses.	
ELP016	BASIC LISTENING AND SPEAKING B This basic level course focuses on developing learner's abilities to communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters and describe in very simple terms aspects of his/her background, immediate environment, and matters in areas of immediate need.	2
ELP017	BASIC READING B This basic level reading course continues to develop students' abilities to read simple texts on a variety of familiar topics.	2
ELP018	BASIC WRITING B This basic level writing course aims to develop students' abilities to write comprehensible sentences on familiar topics.	2
ELP019	BASIC GRAMMAR B This basic level grammar course provides explicit instruction and practice of basic grammatical elements and structures including nouns and adverbs, tenses, and times and reason clauses.	1
ELP031	LOW INTERMEDIATE LISTENING AND SPEAKING A This low-intermediate listening and speaking course was designed to develop the students' abilities to communicate in simple tasks requiring a direct exchange of information and to participating in discussions in the classroom context The course also focuses on developing listening comprehension skills and	2

Course Code	Course Information	Credits
	strategies and everyday and academic vocabulary.	
ELP032	LOW-INTERMEDIATE READING A	2
	This low intermediate level reading course is designed to develop students' skills in reading simple academic and literary texts. The focus is on developing their abilities to identify main ideas and details by answering a variety of question types. The course also focuses on increasing high frequency and academic vocabulary and sentence structures.	
ELP033	LOW INTERMEDIATE WRITING A	2
	This low intermediate writing course is designed to develop students' abilities to write well-developed and fairly well-organized texts on familiar topics. The course introduces different writing process strategies and expands students' knowledge and use of vocabulary, grammar, syntax, and paragraph structure.	
ELP034	LOW INTERMEDIATE GRAMMAR A	1
	This intermediate level grammar course develops learners' ability to notice and understand the meaning and use of new grammatical forms in intermediate level listening and reading texts; use new grammatical forms in speaking and writing with improved accuracy; and plan, monitor, and assess their spoken and written output.	
ELP036	LOW INTERMEDIATE LISTENING AND SPEAKING B	2
	This low intermediate level listening and speaking course continues to develop the students' abilities to communicate in simple tasks requiring a direct exchange of information and to participating in discussions and presentations in the classroom context. The course also focuses on developing listening and comprehension skills and strategies and everyday academic vocabulary.	

Course Code	Course Information	Credits
ELP037	<p>LOW INTERMEDIATE READING B</p> <p>This low intermediate level reading course continues to develop students' skills in reading simple factual and literary texts. Students continue developing skills to demonstrate their ability to identify main ideas and details by answering a variety of question types. The course also focuses on increasing high frequency and academic vocabulary and sentence structures.</p>	2
ELP038	<p>LOW INTERMEDIATE WRITING B</p> <p>This low intermediate writing course is designed to continue developing students' abilities to write well-developed, well-organized, and cohesive texts on familiar topics. The course expands on the different writing process strategies and expands students' knowledge and use of vocabulary, grammar, syntax, and paragraph structure.</p>	2
ELP039	<p>LOW INTERMEDIATE GRAMMAR B</p> <p>This intermediate level grammar course develops learners' ability to notice and understand the meaning and use of new grammatical forms in intermediate level listening and reading texts; use new grammatical forms in speaking and writing with improved accuracy; and plan, monitor, and assess their spoken and written output.</p>	1
ELP051	<p>INT. LISTENING AND SPEAKING A</p> <p>This intermediate-level listening and speaking course develops students' knowledge and skills in social and academic interactions such as lectures, classroom discussions, and presentations in the classroom context. The course also focuses on developing students' listening comprehension skills and strategies, note-taking skills, and building general and academic vocabulary, as well as improving their cohesion,</p>	2

Course Code	Course Information	Credits
	coherence, and clarity of speech.	
ELP052	<p>INTERMEDIATE READING A</p> <p>This intermediate level reading course develops students' skills in reading a variety of academic texts. The focus is on developing students' abilities to identify the main ideas and supporting details in the reading texts and use the information in responses to readings and classroom discussions. The course also focuses on expanding students' academic vocabulary.</p>	2
ELP053	<p>INTERMEDIATE WRITING A</p> <p>This intermediate level writing course is designed to develop students' abilities to write well-developed, well-organized and cohesive essays on personal and academic topics. The course introduces different strategies in the writing process and expands students' knowledge and use of vocabulary, sentence structures, and organization.</p>	2
ELP054	<p>INTERMEDIATE GRAMMAR A</p> <p>This intermediate-level grammar course develops learners' abilities to notice and understand the meaning and use of new grammatical forms in listening and reading texts; use new grammatical forms in speaking and writing with improved accuracy; and plan, monitor, and assess spoken and written output.</p>	1
ELP056	<p>INT. LISTENING AND SPEAKING B</p> <p>This intermediate-level listening and speaking course develops students' knowledge and skills in social and academic interactions such as lectures, classroom discussions, and presentations in the classroom context. The course also focuses on developing students' listening comprehension skills and strategies, note-taking skills, and building general and academic vocabulary, as well as improving their cohesion,</p>	2

Course Code	Course Information	Credits
	coherence, and clarity of speech.	
ELP057	<p>INTERMEDIATE READING B</p> <p>This intermediate level reading course develops students' skills in reading a variety of academic texts. The focus is on developing students' abilities to identify the main ideas and supporting details in the reading texts and use the information in responses to readings and classroom discussions. The course also focuses on expanding students' academic vocabulary.</p>	2
ELP058	<p>INTERMEDIATE WRITING B</p> <p>This intermediate level writing course continues to develop students' abilities to write well-developed, well-organized, and cohesive essays on personal and academic topics. The course introduces different strategies in the writing process and expands students' knowledge and use of vocabulary, sentence structures, and organization.</p>	2
ELP071	<p>HIGH INTER LISTENING/SPEAKING A</p> <p>This high intermediate course was designed to develop students' abilities to listen to short authentic academic talks. It also aims to develop their abilities to participate in classroom discussion and presentations.</p>	2
ELP072	<p>US CULTURE</p> <p>This course introduces students to various topics related to US culture, values, traditions, and ways of life through readings, discussion, and reflection on experiences.</p>	2
ELP073	<p>HIGH INTER WRITING A</p> <p>This high intermediate course was designed to develop students' writing abilities to write well-developed, well-</p>	2

Course Code	Course Information	Credits
	organized, and clear argumentative essays on a general or academic topic.	
ELP074	HIGH INTER GRAMMAR A	1
	This high intermediate grammar course was designed to develop students' ability to make grammar choices in writing. It focuses on giving students corrective feedback on their writings, addressing common errors among second language writers, teaching students' self-editing skills, and introducing certain grammatical features useful for various academic writing tasks.	
ELP076	HIGH INTER LISTENING/SPEAKING B	2
	This high intermediate course was designed to continue developing students' abilities to listen to short authentic academic talks. It also aims to develop their abilities to participate in classroom discussion and presentations.	
ELP077	US CULTURE AND PITTSBURGH	2
	US Culture-Pittsburgh is a course of study which will acquaint each student with historical and cultural information about the City of Pittsburgh. It will also allow students to participate in and enjoy cultural experiences with are uniquely "Pittsburgh."	
ELP078	HIGH INTER WRITING B	2
	This high intermediate course was designed to develop students' writing abilities to write well-developed, well-organized, and clear argumentative essays on a general or academic topic.	
ELP079	HIGH INTER GRAMMAR B	1
	This high intermediate grammar course was designed to develop students' ability to make grammar choices in writing. It	

Course Code	Course Information	Credits
	<p>focuses on giving students corrective feedback on their writings, addressing common errors among second language writers, teaching students self-editing skills, and introducing certain grammatical features useful for various academic writing tasks.</p>	
ELP103	<p>ADVANCED GRAMMAR</p> <p>This advanced grammar course was designed to develop students' ability to make grammar choices in writing with the focus on writing styles and mechanics specified in the latest guidelines for APA.</p>	3
ELP122	<p>AMERICAN LITERATURE</p> <p>American Literature is a survey of contemporary American fiction, and all of our readings will be in the form of short stories. Students will learn to identify literary elements of fiction that help readers identify author purpose, audience, and cultural significance. Students will also be expected to write short response papers that discuss these literary elements in selected stories and to attend at least one literary event.</p>	3
ENG100	<p>INTRODUCTION TO LITERARY STUDIES</p> <p>This course focuses on the principles and methods of close literary analysis to develop critical reading and thinking skills. By examining how culture relates to literature, students explore how ethnic heritage contributes to writing; how writers define community and culture; and how strong oral traditions translate into literary forms.</p>	3
ENG102	<p>EXPOSITORY WRITING</p> <p>A practical course for students who need to improve their grammar and usage skills, digesting and arranging ideas, marshalling suitable evidence, illustrating a point, composing distinct paragraphs, and commanding various appropriate means of reaching an intended audience. May be repeated up</p>	3

Course Code	Course Information	Credits
	to three times with the permission of the English program.	
ENG105	<p>FIRST-YEAR WRITING</p> <p>This introduction to college composition covers analytical and argumentative writing, oral presentation, critical reading, information literacy, and academic integrity. The course employs active-learning pedagogy of discussion and dialogue and examines intersections of race, gender, class, ethnicities, and systems of belief through the lens of relevant topics. Students who need additional support with writing skills beyond what is normally covered in the classroom (based on a diagnostic writing exam required before matriculation) will require Supplemental instruction through the PACE Center. Students with transfer credits may meet the requirement for ENG105 with the transfer of a college-level composition course or AP/IB credit.</p>	3
ENG200	<p>FRANKENSTEIN: CREATION OF CULTURE</p> <p>This course introduces students to Mary Shelley's <i>Frankenstein</i> or <i>The Modern Prometheus</i>. In addition to studying this primary text, we will examine the reasons for the extensive presence that Frankenstein and his creature occupy in our cultural imagination. To this end, many critical approaches will inform our analysis of the text and mythology of Frankenstein in both literature and film.</p>	3
ENG201	<p>ENVIRONMENTAL LITERATURE AND FILM</p> <p>ENG 201 considers how literature and film can engage the reader/viewer in issues of ecological sustainability. The course promotes the value of green spaces, an understanding of ecological systems, and a decentering of commonly held anthropocentric assumptions. Texts include contemporary films, fiction and nonfiction, such as Ruth Ozeki's <i>All Over Creation</i> (2004) or Kingsolver's <i>Animal, Vegetable, Miracle</i> (2008). This course includes 10 hours of experiential learning at the Eden</p>	3

Course Code	Course Information	Credits
	Hall Campus.	
ENG204	<p>WORLD LITERATURE</p> <p>A critical and imaginative approach to major themes and genres in literary works from different places and periods in human history. Emphasis on interconnectedness of culturally diverse efforts to make sense, via literary representation, of personal and community experience.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• ENG100 : Introduction to Literary Studies <li>• ENG105 : First-Year Writing 	3
ENG207	<p>BRITISH WRITERS I</p> <p>A critical and historical approach to major writers in English during the Anglo-Saxon, medieval, and Renaissance periods, including such representative authors as the Beowulf poet, Chaucer, Spenser, Shakespeare, Donne, and Milton.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• ENG100 : Introduction to Literary Studies <li>• ENG105 : First-Year Writing 	3
ENG208	<p>BRITISH WRITERS II</p> <p>A critical and historical approach to major writers in English during the Augustan, Romantic, and Victorian periods, including such representative authors as Swift, Pope, Johnson, Wordsworth, Keats, Arnold, Tennyson, and Browning.</p>	3
ENG209	<p>LINGUISTICS</p> <p>An introduction to theoretical and applied linguistics as the "science of language" and its history, nature, and functions. Includes consideration of cross-disciplinary and cross-cultural linguistics, the nature of learning language, and linguistic</p>	3

Course Code	Course Information	Credits
	analysis. Fulfills secondary English education certification requirement; recommended also for any student considering graduate study in English.	
ENG213	SPECIAL TOPICS Special Topics	3
ENG216W	AMERICAN WRITERS I A study of cultural and literary developments in America, beginning with the Puritans and culminating with the writers of the American Renaissance: Emerson, Thoreau, Douglass, Hawthorne, and Melville. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • ENG100 : Introduction to Literary Studies • ENG105 : First-Year Writing 	3
ENG217W	AMERICAN WRITERS II A continuation of English 216, with emphasis on such figures as Whitman, Dickinson, Twain, Henry James, Faulkner, and Sylvia Plath. Pre-Requisites: Complete all 2 of the following courses: <ul style="list-style-type: none"> • ENG100 : Introduction to Literary Studies • ENG105 : First-Year Writing 	3
ENG220	GENDER AND SEXUALITY IN SPECULATIVE FICTION This course focuses on speculative fiction genres (which include but are not limited to science fiction, fantasy, and futurism). Course materials examine issues of gender and sexuality and how writers working in these genres envision alternative gendered realities through their constructions of language, the body, sensuality, identity, etc.	3

Course Code	Course Information	Credits
ENG234	<p>LITERARY PUBLISHING</p> <p>This course is an introduction to literary publishing through practice, reading, and discussion. All phases of the publishing process are addressed, especially copyediting, design, and marketing. The course is designed to allow students to gain experience and knowledge in the creative, technical, and professional aspects of publishing a literary journal.</p>	3
ENG241	<p>WRITING FOR PROFESSIONALS</p> <p>Writing for Professionals helps students write clearly and effectively about a variety of subjects in genres related to the workplace. Through writing and reading assignments, students learn about targeting an audience, organizing writing, and developing a professional style. They create documents useful when seeking employment and in the workplace.</p>	3
ENG242	<p>INTRODUCTION TO CREATIVE WRITING</p> <p>This course introduces students to the distinguishing features and traditional elements of poems, plays, fiction, and nonfiction writing. Students read classic and contemporary works in each of these genres, while attending to how a given text adheres to or plays with generic norms. Readings in genre theory will accompany each unit of the course.</p>	3
ENG243	<p>CREATIVE WRITING I</p> <p>Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENG242 : Introduction to Creative Writing 	3

Course Code	Course Information	Credits
ENG244	<p>CREATIVE WRITING II</p> <p>Students present a selection of their work each week for class comment and criticism. In addition, special problem topics are assigned weekly to develop writing skills. Readings concentrate on contemporary prose and verse.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENG243 : Creative Writing I 	3
ENG245	<p>ADVANCED WRITING WORKSHOP</p> <p>This course focuses on creative writing for experienced writers, geared toward preparing a finished manuscript for potential publication. Fiction writers work intensively on a single story, revising and integrating its various parts. Poets write either long poems or poetic sequences and experiment with contemporary variations on traditional forms.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG243 : Creative Writing I • ENG244 : Creative Writing II 	3
ENG262	<p>INTRODUCTION TO WOMEN WRITERS</p> <p>Examining writers from Mary Wollstonecraft to the present, this course delineates the features of a literary tradition specific to women writing in English. Students study novels, essays, and poetry.</p>	3
ENG282	<p>20TH-CENTURY AFRICAN-AMERICAN LITERATURE</p> <p>This course is a critical study of major African-American writers from the Harlem Renaissance of the 1920s to the present. Although the course concentrates on primary texts, specific attention is paid to contextualizing these works within historical and cultural frameworks. (See also Cultural Studies.)</p>	3

Course Code	Course Information	Credits
ENG283	<p>THE HARLEM RENAISSANCE</p> <p>The course explores the literature, politics, and arts of the Harlem Renaissance. This artistic, philosophical, and intellectual movement in New York City's Harlem took place roughly from the early 1920s to the onset of the Depression. Topics to be considered include Modernism, The Jazz Age, and Urban Migration. Specific focus will be placed on the relationship between identity and geography as we consider the effects of migration and urbanization.</p>	3
ENG286	<p>CONTEMPORARY AFRICAN-AMERICAN WOMEN WRITERS</p> <p>This course will examine the literature of African-American women from 1950 to the present. Specifically, students focus on issues of marginalization, silencing, and female community and how they affect the construction of these narratives. Possible authors include Shange, Naylor, Williams, and Jones. (See also Cultural Studies.)</p>	3
ENG287	<p>AFRICAN-AMERICAN WRITERS</p> <p>This course provides an introduction to the African-American expressive tradition, including poetry, fiction, autobiography, song and folktales from the 18th century to the present. Examining writers such as Douglass, Chesnut, Brooks, Baldwin, Ellison, and Walker, this course works to delineate the critical and historical contours of the African-American literary tradition.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• ENG100 : Introduction to Literary Studies <li>• ENG105 : First-Year Writing 	3
ENG302	<p>ENVIRONMENTAL CHILDREN'S FICTION AND FILM</p> <p>This course considers how children's and young adult literature</p>	3

Course Code	Course Information	Credits
	<p>and film can awaken environmental sensibilities in the reader/viewer. Students explore textual representations of flora, fauna, and the elements; the human desire to affiliate with the natural living world; and how fiction and film can promote ecological literacy and awareness.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	
ENG303	<p>FOOD AND AMERICAN IDENTITY</p> <p>Examines literature in multiple genres (e.g. fiction, poetry, creative non-fiction, graphic novel, film/television, and long-form journalism) through the theoretical lens of food studies to understand how writers use food as a cultural object to point to issues of identity including race, class, gender, sexuality, age, ability, and systems of belief.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG100 : Multicultural Literature • ENG100 : Introduction to Literary Studies <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing • ENG105 : First - Year Communication Seminar 	3
ENG310	<p>SUMMER COMMUNITY OF WRITERS</p> <p>The ten-day intensive residency in Pittsburgh is for upper-level BFA Creative Writing students. The residency is composed of genre-specific craft sessions, workshops, lectures, readings and one-on-one conferences with mentors.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • ENG242 : Introduction to Creative Writing • ENG243 : Creative Writing I • ENG244 : Creative Writing II • ENG245 : Advanced Writing Workshop 	3

Course Code	Course Information	Credits
ENG313	SPECIAL TOPICS Special Topics	3
ENG321W	SHAKESPEARE SURVEY A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art. Pre-Requisites: Complete any 1 of the following 3 courses: <ul style="list-style-type: none"> • ENG207 : British Writers I • ENG216 : American Writers I • ENG216W : American Writers I 	3
ENG327	WRITING ABOUT ENVIRONMENT SCIENCE This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Three hours of lecture per week. Cross-listed as ENV 327. Pre-requisite: any 200-level ENV course or permission of either department chairperson. Pre-Requisites: Complete any 1 of the following 19 courses: <ul style="list-style-type: none"> • ENV201 : Special Topics • ENV202 : Exercise and the Environment • ENV213V : Special Topics • ENV217 : Env Solutions-systems • ENV221E : Organic Gardening • ENV222E : Organic Gardening • ENV224 : Environmental Sculpture • ENV225 : Environmental Ethics 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • ENV230 : Wilderness- Food Sustainability • ENV230W : Wilderness - Food Sustainability • ENV231 : Wilderness & Food Sustainability • ENV233 : Soundscapes:mus-nat-silnc • ENV242 : Women and the Global Environment • ENV250 : Plants, People, and the Environment • ENV255 : Soundscapes: Music, Nature, and Silence • ENV262 : Environmental Economics • ENV265 : Environmental Economics • ENV275 : Ecological Economics • ENV285 : Internatl Env Policy 	
ENG350W	<p>SEMINAR IN LITERARY THEORY AND SCHOLARLY WRITING</p> <p>An advanced course in writing literary analysis and methods of literary research; required of all junior English majors and interdepartmental majors before enrollment in the tutorial. Second-term junior status is required.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG100 : Multicultural Literature • ENG100 : Introduction to Literary Studies 	3
ENG355	<p>ADVANCED WRITING AND STYLISTICS</p> <p>This is an advanced writing class which concentrates on style, meaning, and effect. It is designed for upper-level students, and emphasizes the skills of writing more effective sentences, paragraphs and essays. The course focuses on writing academic papers, applications, proposals, and personal statements across the disciplines in appropriate formats.</p>	3
ENG365	<p>WRITING FICTION</p> <p>This is an upper-level course for BFA students specializing in fiction. Reading and writing will center on the craft of fiction and will include exploration of tools for creating character, scene, sense of place, summary, dialogue, framing, flashbacks, and</p>	3

Course Code	Course Information	Credits
	<p>transitions, as well as oral presentation and publication.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 : Introduction to Literary Studies • ENG242 : Introduction to Creative Writing 	
ENG366	<p>WRITING NONFICTION</p> <p>This is an upper-level course for BFA students specializing in creative nonfiction. Reading and writing will center on the craft of nonfiction and will include exploration of tools for scene, sense of place, point of view, character and narrator development, tone, lyricism, structure, as well as oral presentation and publication.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG100 : Multicultural Literature • ENG100 : Introduction to Literary Studies <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENG242 : Introduction to Creative Writing 	3
ENG367	<p>MULTI-GENRE WRITING</p> <p>This is an upper-level course for BFA students focusing on creative writing for experienced writers, geared toward preparing a finished manuscript or portfolio of work for potential publication in the student's primary genre. Students read and write in the craft of poetry, fiction, and creative nonfiction. Offered every spring.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG100 : Introduction to Literary Studies • ENG242 : Introduction to Creative Writing 	3
ENG368	<p>WRITING POETRY</p> <p>This is an upper-level course for BFA students specializing in poetry. Reading and writing will center on the craft of poetry and</p>	3

Course Code	Course Information	Credits
	<p>will include exploration of poetic tools including figures of speech, meter, music and rhythmic devices in both traditional and experimental forms, and oral performance and publication of poetry.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG100 : Multicultural Literature • ENG100 : Introduction to Literary Studies <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENG242 : Introduction to Creative Writing 	
ENG385	<p>TONI MORRISON SEMINAR</p> <p>This seminar is a study of Toni Morrison's literature within the context of African-American critical theory. Through Morrison's work, students will engage in current issues regarding the politics of language, narrative authority, historical revision, the production of meaning, and African-American subjectivity.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	3
ENG413	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
ENG419	<p>FRONTIER WOMEN</p> <p>An impressive number of narratives, novels, diaries, and poems recording the responses of women to the American frontier have become available in recent years. By reading about these frontier experiences, and examining differences in perception and conception based apparently on gender, students will better understand how the frontier functioned within American culture and what "cultural work" these texts accomplished.</p>	3
ENG425	<p>BLEAK HOUSES: SHIFTING LANDSCAPES OF THE</p>	3

Course Code	Course Information	Credits
	<p>ENGLISH NOVEL</p> <p>This course will cover the modern European novel through the thematic rubric of "love and lies." The latter theme affords the opportunity to consider fiction not only as a medium of the literary genre of the novel but also as a discourse of self-expression, self-creation, and in the cases of some our lying protagonists, self-destruction. Students will focus on characters' constructions of "truth" and "lies" as these concepts are informed by characters' emotional positions. At its most ambitious, this focus on the dynamic of intersubjectivity not only provides important insights into the literature we will read but also enhances students' understanding of the interpersonal connections that drive individuals' worldviews and narratives.</p>	
ENG427	<p>ETHNICITY AND PLACE</p> <p>This course focuses on the connection between place and cultural identity in the shaping of a writer's distinctive voice. Influences include ethnic, regional, and linguistic markers, as well as dislocation from the place of origination. Regional focus within the global community may vary by academic term.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• ENG105 : First-Year Writing 	3
ENG428	<p>ACADEMIC WRITING</p> <p>Students develop the writing skills necessary for success in graduate school, including proper citations, time management, and the content and format for two types of research proposals. Students become proficient in the APA style and have the opportunity to resolve grammar and structure problems with the professor.</p>	3
ENG429	<p>THE LITERARY COOKBOOK</p> <p>This course examines the contemporary cookbook as a genre</p>	3

Course Code	Course Information	Credits
	of literary nonfiction, influenced by autobiography, memoir, and personal essay. Students will read and write recipe texts through the theoretical lenses of food studies and literary theory to understand how cookbooks function as literature in the popular market and the academy.	
ENG434	LITERATURE OF FACT: INFORMING THE WORLD	3
	Working from careful study of the construction of “fact” and “truth” in selected nonfiction genres, students will produce informative digital projects designed to engage a public audience. Readings may come from a variety of fields including humanities, culture, art, natural and social sciences, psychology, history, sustainability, and technology.	
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	
ENG446	WILDERNESS AND LITERATURE	3
	Through close reading of poetry and prose, students will explore the relationship between wilderness and literature - both representations of the natural world and what Stanley Kunitz calls "your wilderness . . . the untamed self that you pretend doesn't exist, all that chaos locked behind the closet door, those memories yammering in the dark." Writers examined include: Anne Carson, Mark Doty, Kathleen Hill, and Virginia Woolf.	
ENG449	EXILES	3
	This course will examine the 20th-century condition of exile in relation to its different configurations, from European émigrés to postcolonial subjects to experiences of exile in the United States, to the relation of exile to Diaspora (African, Indian, and Jewish). Students will see how different patterns of movement define subjects variously as exiles, migrants, nomads, and tourists. They also will approach the concept of exile from psychological, geographical, and cultural angles to understand	

Course Code	Course Information	Credits
	the different uses of the term, its scope, and its limitations.	
ENG452	<p>ECOFEMINIST LITERATURE</p> <p>This course brings together theoretical, nonfictional, and fictional approaches to the study of women and the environment. Students will examine how diverse ecofeminist writers problematize, resituate, and reclaim the woman/nature paradigm--a construct historically based in patriarchal culture. This course focuses particularly on how representations of women and environment (ranging from the traditional to the radical) can help students rethink and reimagine their relationship to the ecological world.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• ENG207 : British Writers I <li>• ENG287 : African-American Writers 	3
ENG480	<p>AUGUST WILSON SEMINAR</p> <p>This course explores the dramatic work of August Wilson, paying particular attention to Wilson's ten-play cycle, which chronicles twentieth century African American life. Wilson's "Pittsburgh cycle" serves as a lens for reading the history of the city decade by decade.</p>	3
ENG490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of</p>	3

Course Code	Course Information	Credits
	<p>both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG350W : Seminar in Literary Theory and Scholarly Writing 	
ENG491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
ENG493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
ENG498	<p>TUTORIAL: ENGLISH</p> <p>Tutorial: English</p>	4
ENG512	<p>TEACHING CREATIVE WRITING IN ALTERNATIVE SPACES</p> <p>This course prepares students to teach creative writing in alternative spaces, including jails, prisons, halfway houses, and medical facilities. Students will study existing programs, learn strategies to work with special populations, design a course, observe community based classes, and facilitate a community workshop.</p>	3
ENG513	<p>WRITING ABOUT FOOD</p> <p>Students will develop technique and skills for writing about food and culture by studying ethics; journalism, advertising, multimodal and new technology venues, recipe writing, food</p>	3

Course Code	Course Information	Credits
	criticism, writing about food in a variety of genres from history to fiction, magazines, and websites. Course emphasizes both print and online media.	
ENG515	TEACHING CREATIVE WRITING	3
	Students will explore the genres of poetry, fiction, drama, and nonfiction from the perspective of a teacher, producing lesson plans, as well as developing a final curricular creative writing unit/course. Aspects of lesson design, classroom environment/management, the writing process, writing workshops, assessment, publication, and performance will be emphasized.	
ENG523	THE CRAFT OF CREATIVE WRITING: MULTIPLE GENRES	3
	This course may substitute for any other craft course for students specializing in any genre. Students will be introduced to the craft of poetry, fiction, and non-fiction, and will also be introduced to the workshop method and given instruction on sending out work for publication.	
ENG525	BLEAK HOUSES: SHIFTING LANDSCAPES OF THE ENGLISH NOVEL	3
	This course surveys the English Novel from 1850 through the present. Of particular interest will be how these novels depict their subjects' relationships with notions of Englishness, and with the radically changing landscape from estate-culture to urban-industrialized, and ultimately, suburban. Each novel will explore a new sense of Englishness rooted in the social-political and economic events of the era.	
ENG527	ETHNICITY AND PLACE	3
	This course focuses on the connection between geographic	

Course Code	Course Information	Credits
	<p>places and cultural identities. Ethnic, regional, and linguistic markers help define writers' distinctive voices. Dislocation from the place of origination can also result in a creative tension. Students will read a variety of texts that explore the borderlands between ethnicity and place.</p>	
ENG528	<p>ACADEMIC WRITING</p> <p>Students develop the writing skills necessary for success in graduate school, including proper citations, time management, and the content and format for two types of research proposals. Students become proficient in the APA style and have the opportunity to resolve grammar and structure problems with the professor.</p>	3
ENG529	<p>THE ART OF COMPRESSION</p> <p>A multi-genre writing workshop focusing exclusively on the short form in fiction, nonfiction and poetry. This course is designed to teach the techniques and practice of short-form writing through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions.</p>	3
ENG531	<p>READINGS IN CONTEMPORARY LYRICISM</p> <p>This course is a graduate seminar focusing on the close reading of text from various genres (poetry, fiction, nonfiction, and children's writing) that use lyricism as a primary craft device. Designed to complement the craft workshop, this course or Readings in Contemporary Narrative is required for all MFA students.</p>	3
ENG532	<p>READINGS IN PROSE AND POETRY</p> <p>This course is a graduate seminar focusing on the close reading of prose and poetry drawn primarily from the modern and</p>	3

Course Code	Course Information	Credits
	contemporary periods. Designed to complement the craft workshops, this course is required of all MFA students.	
ENG533	READINGS IN CONTEMPORARY NARRATIVE	3
	This course is a graduate seminar focusing on the close reading of narrative texts from several genres (fiction, nonfiction, poetry, and children's writing), drawn from modern and contemporary periods. Designed to complement craft workshops, this course or Readings in the Contemporary Lyric is required of all MFA students.	
ENG535	WRITING POETRY: FORM	3
	A poetry writing workshop to focus on form. Pre Requisite: ENG583	
	<p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG583 : The Craft of Poetry 	
ENG537	WRITING POETRY: LITERARY MOVEMENTS	3
	A poetry workshop focusing on readings from a particular poetic movement, and writing poetry that models or responds to movement. Pre-requisite: ENG583	
	<p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG583 : The Craft of Poetry 	
ENG539	WRITING CREATIVE NONFICTION: MEMOIR	3
	A creative Non-Fiction workshop focusing mainly on the memoir. Pre requisite: ENG582	
	<p>Pre-Requisites: Complete all 2 of the following courses:</p>	

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG582 : The Craft of Nonfiction 	
ENG544	<p>WRITING CREATIVE NONFICTION: THE LYRIC & FORMALLY ADVENTUROUS ESSAY</p> <p>A creative non-fiction workshop focused on lyric and experimental essay forms.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres 	3
ENG545	<p>WRITING CREATIVE NONFICTION: LITERARY JOURNALISM</p> <p>A creative non-fiction workshop focusing on literary journalism. Pre Requisite: ENG 582</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG582 : The Craft of Nonfiction 	3
ENG546	<p>WILDNESS AND LITERATURE</p> <p>Students read poetry, nonfiction and fiction that explore the relationship between wilderness and humans as well as the relationship between wilderness and culture. This seminar will trace the idea of wilderness in American literature through the twenty-first century.</p>	3
ENG548	<p>WRITING CREATIVE NONFICTION</p> <p>This course is designed to teach the techniques and practice of creative nonfiction through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre-requisite: ENG582</p>	3

Course Code	Course Information	Credits
ENG549	<p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG582 : The Craft of Nonfiction 	3
ENG551	<p>WRITING FICTION: THE SHORT STORY</p> <p>This course furthers one's technique and practice of fiction writing via focusing on the short story. Classic models are read and analyzed for variety of P.O.V., character development, story structure, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in a workshop format.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG581 : The Craft of Fiction 	3
ENG552	<p>ECOFEMINIST LITERATURE</p> <p>This course brings together theoretical, non-fictional, and fictional approaches to the study of women and the environment. This course focuses particularly on how representations of women and environment can help students rethink and re-imagine their relationships to the Earth.</p>	3
ENG553	<p>WRITING POETRY</p> <p>This course is designed to teach the techniques and practice of poetry writing through participation in a process of peer review</p>	3

Course Code	Course Information	Credits
	<p>and commentary, reading and discussions of selections of other poets and poems, and regular submissions of original creative compositions. The course is taught in a workshop format.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG583 : The Craft of Poetry 	
ENG554	<p>WRITING FICTION</p> <p>This course is designed to teach the techniques and practice of fiction writing through participation in a process of peer review and commentary, reading and discussions of selections of other writers and stories, and regular submissions of original creative compositions. The course is taught in a workshop format. Pre Requisite: ENG581</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG581 : The Craft of Fiction • ENG582 : The Craft of Nonfiction 	3
ENG557	<p>WRITING FICTION: STORY COLLECTIONS/NOVEL-IN-STORIES</p> <p>This course furthers one's technique and practice of fiction writing via studying book length story collections and/or story cycles. Contemporary models are considered for their creative melding of varied themes. P.O.V.'s structures, etc. Students are expected to participate in ongoing discussions and weekly peer review. This course is taught in in a workshop format. Pre requisite: ENG581</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres • ENG581 : The Craft of Fiction 	3
ENG566	<p>YOUNG ADULT LITERATURE</p>	3

Course Code	Course Information	Credits
ENG567	<p>This course explores young adult fiction and focuses on authors that capture the teenage experience. Students learn the distinction between children's and adolescent literature, the history of the genre, the psychological challenges of adolescence, and literary structural elements and techniques.</p> <p>LONG PROJECTS</p> <p>The Long Projects class is a multi-genre workshop focusing on generating long projects including memoirs, essay collections, novels, story collections, poetry collections or long poems. Students may choose to work toward their theses in this class but work is not limited to the thesis.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 4 courses:</p> <ul style="list-style-type: none"> <li>• ENG523 : The Craft of Creative Writing: Multiple Genres <li>• ENG581 : The Craft of Fiction <li>• ENG582 : The Craft of Nonfiction <li>• ENG583 : The Craft of Poetry 	3
ENG569	<p>PRACTICUM: FOURTH RIVER JOURNAL-2</p> <p>This course is a practicum in which grad students publish the print edition of Chatham's national literary journal, The Fourth River. All phases of the publishing process are addressed, with a special emphasis on design, production, proofreading, marketing, and distribution.</p>	3
ENG572	<p>THE LITERATURE OF SOCIAL ENGAGEMENT</p> <p>A course in which students examine literature that engages with social problems. Readings will include poetry, creative nonfiction, literary journalism, scriptwriting, and fiction. In examining these texts, we will analyze the finished product as well as research methods authors used to research a topic and render it on the page.</p>	3

Course Code	Course Information	Credits
ENG580	<p>AUGUST WILSON AND PITTSBURGH</p> <p>This course explores the dramatic work of August Wilson, paying particular attention to Wilson's ten-play cycle. We will perform close readings of the plays, examining themes such as urban migration, the blues and Black Nationalism, while simultaneously using Wilson's drama as a lens for reading the history of Pittsburgh.</p>	3
ENG581	<p>THE CRAFT OF FICTION</p> <p>This is a required course for MFA students specializing in fiction. Students will experiment with creating scene, sense of place, summary, dialogue, framing, flashbacks, and transitions. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>	3
ENG582	<p>THE ART AND CRAFT OF NARRATIVE</p> <p>Readings and writing in this multi-genre course will focus on constructing narratives in fiction, nonfiction, poetry or writing for children. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>	3
ENG583	<p>THE ART AND CRAFT OF THE LYRIC</p> <p>Readings and writing in this multi-genre course will focus on writing lyrically in poetry and prose. Students will be introduced to the workshop method and given instruction on sending work out for publication.</p>	3
ENG584	<p>THE ENVIRONMENTAL IMAGINATION</p> <p>This is a multi-genre course that focuses on the art and craft of nature and environmental writing. Students will read and study contemporary nature and environmental writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this</p>	3

Course Code	Course Information	Credits
	genre.	
ENG585	<p>TRAVEL WRITING</p> <p>This course focuses on the art and craft of travel writing. Students will read and study contemporary travel writing, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to writers in this genre.</p>	3
ENG589	<p>CREATIVE WRITING: MULTI-GENRE</p> <p>A multi-genre craft course that includes poetry, fiction, creative nonfiction, children's writing and hybrid genres. This course fulfills the craft requirement for all genres.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG523 : The Craft of Creative Writing: Multiple Genres 	3
ENG595	<p>INDEPENDENT LITERARY PUBLISHING</p> <p>This course gives students the opportunity to gain hands-on experience as publishers. Students will research independent literary presses or magazines of their own choosing, and then they will publish a literary chapbook by an author other than themselves.</p>	3
ENG600	<p>FOUNDATIONS OF CREATIVE WRITING</p> <p>ENG 600 is a first-year tutorial course comprised of one teacher and one student; it is designed to provide a foundation in creative writing craft for the student writer.</p>	3
ENG601	<p>FOUNDATIONS IN LITERARY ANALYSIS</p> <p>ENG 601 is a first-year tutorial course for students choosing the low-res MFA format, comprised of one teacher and one student;</p>	3

Course Code	Course Information	Credits
	it is designed to provide a foundation in analytical reading and writing for the student writer.	
ENG605	<p>PROSE THESIS SEMINAR</p> <p>A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.</p>	3
ENG606	<p>THESIS SEMINAR</p> <p>A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.</p>	3
ENG607	<p>THESIS SEMINAR: POETRY</p> <p>A workshop focusing on generating a thesis proposal, bibliography and significant creative work towards completion of the student's thesis. Readings will focus on creating and articulating a creative process and vision as well as models for longer creative projects. Normally taken the first semester of the student's second year, this course is a prerequisite for ENG698 Final Manuscript.</p>	3
ENG621	<p>ADVANCED LITERARY ANALYSIS I</p> <p>ENG 621 is a first-year mentorship, comprised of one teacher and one student; it is designed to deepen the development of the student writer. In it, students work one-on-one with a faculty</p>	3

Course Code	Course Information	Credits
	mentor who guides their study of literature and analysis. ENG 621 should build off the work of ENG 601.	
ENG622	ADVANCED CREATIVE WRITING I ENG 622 is a first-year mentorship, comprised of one teacher and one student; it is designed to deepen the development of the student writer. In it, students work one-on-one with a faculty mentor who guides their study of creative writing craft. ENG 622 should build off the work of ENG 600.	3
ENG623	ADVANCED LITERARY ANALYSIS II ENG 623 is a second-year mentorship comprised of one teacher and one student; it is designed to refine the development of the student writer. In it, students work with a faculty mentor who guides their study of literature and analysis. ENG 623 should build off the work of ENG 621.	3
ENG624	ADVANCED CREATIVE WRITING II ENG 624 is a second-year mentorship comprised of one teacher and one student; it is designed to refine the development of the student writer. In it, students work with a faculty mentor who guides their study of advanced creative writing. .	3
ENG660	THESIS WRITING MENTORSHIP ENG 660 is a second-year mentorship course comprised of one teacher and one student; it is designed to expedite the development of the student's creative thesis project. During the 3-credit mentorship, a student works one-on-one with a faculty mentor who guides the student's generation of creative thesis materials.	3

Course Code	Course Information	Credits
ENG674	<p>FIELD SEMINAR: INTERNATIONAL</p> <p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will always be outside the United States. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>	3
ENG674A	<p>FIELD SEMINAR: INTERNATIONAL</p> <p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will always be outside the United States. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>	3
ENG674B	<p>FIELD SEMINAR: INTERNATIONAL</p> <p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will always be outside the United States. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>	3
ENG676	<p>ARTISTS IN THE COMMUNITY</p> <p>The field seminar is a traveling creative writing workshop designed to push students outside the realm of comfort and make them question their assumptions about themselves and their culture. Travel locations and specific topics will vary, but will be within Pittsburgh and Western Pennsylvania. May be repeated for credit. Additional fee(s): Field Seminar fee.</p>	3
ENG678	<p>FIELD PLACEMENT</p>	3

Course Code	Course Information	Credits
	During this course, taken in one of the final semesters of the M.F.A., students teach/study in a supervised field placement and practice the pedagogy of creative writing in a working classroom.	
ENG683	SPECIAL TOPICS Literature Courses on differing topics, usually thematically based.	3
ENG691	INDEPENDENT STUDY Independent study on a topic of the student's choice. Pre-Requisites: Complete the following course: • XXX123 : Permission of Instructor	1
ENG692	INDEPENDENT STUDY Independent study on a topic of the student's choice. Pre-Requisites: Complete the following course: • XXX123 : Permission of Instructor	2
ENG693	INDEPENDENT STUDY Independent study on topics of the student's choosing. Pre-Requisites: Complete the following course: • XXX123 : Permission of Instructor	3
ENG694	INTERNSHIP Internship with a publishing company, literary press or other writing organization.	3

Course Code	Course Information	Credits
ENG698	<p>FINAL MANUSCRIPT</p> <p>Independent work on the final creative thesis and critical introduction. Taken in the last year of the MFA. The Thesis Seminar (ENG 605, 606, 607, 608, or 609) is a prerequisite for this course.</p> <p>Pre-Requisites: Complete any 1 of the following 5 courses:</p> <ul style="list-style-type: none"> • ENG605 : Prose Thesis Seminar • ENG606 : Thesis Seminar • ENG607 : Thesis Seminar: Poetry • ENG608 : Thesis Seminar: Children's Writing • ENG609 : Thesis Seminar: Screenwriting 	3
ENG709	<p>SUMMER COMMUNITY OF WRITERS</p> <p>This ten-day residency in Pittsburgh is particularly tailored towards ACT 48 educators or students seeking elective credit. Daily attendance in genre-specific writing workshops and conferences with visiting authors is required. Craft sessions, lectures and readings are available but optional.</p>	3
ENG710I	<p>SUMMER COMMUNITY OF WRITERS - PART ONE</p> <p>Summer Community of Writers - Part One</p>	6
ENG710II	<p>SUMMER COMMUNITY OF WRITERS - PART TWO</p> <p>Summer Community of Writers - Part Two</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENG710 : Summer Community of Writers • ENG710I : Summer Community of Writers - Part One 	6
ENG800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1

Course Code	Course Information	Credits
ENV115	<p>SHIFTING ENVIRONMENTAL PARADIGMS</p> <p>This course emphasizes quantitative and formal reasoning, critical reading and analytical thinking. Students, drawing on real life examples in environmental science, learn to identify and evaluate data and become knowledgeable consumers of scientific information, and explore the ways science and technology impact our everyday interactions with the world around us.</p>	3
ENV115L	<p>ENVIRONMENTAL PARADIGMS LAB</p> <p>This course uses laboratory modules on soil, water, plants, animals, climate and energy to enhance the material presented in ENV 115. Students will learn to make careful and precise observations, design testable hypotheses, collect and interpret qualitative and quantitative data, and integrate these findings into written and oral presentations.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • ENV115 : Shifting Environmental Paradigms 	1
ENV116	<p>GLOBAL ENVIRONMENTAL CHALLENGES</p> <p>This course explores the global implications of environmental issues. It is designed for all students interested in our global environment, one of the most critical issues of our time. The basic premise is that global ecological systems are in decline. This course will not only introduce students to the major issues causing or relating to this ecological decline, but also provide a template for thinking about and acting on solutions. Therefore, the focus is on active, participation-based learning, and students should leave the course ready to create environmental change.</p>	3
ENV129	<p>OUR FRAGILE EARTH: A SCIENTIFIC PERSPECTIVE</p> <p>This course introduces students to a wide range of environmental issues from a scientific perspective. Specific</p>	3

Course Code	Course Information	Credits
	<p>topics vary from year to year, but this course utilizes lectures, discussions, laboratories, guest speakers and field trips to increase knowledge about environmental problems as well as increase scientific knowledge and literacy.</p>	
ENV129L	<p>OUR FRAGILE EARTH LAB</p> <p>This lab offers hands-on opportunity to perform basic environmental lab skills, including water testing, bioassay, and greenhouse experiment protocol. The course may be taken independently as a freestanding environmental lab course. Two hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	1
ENV145	<p>ENVIRONMENTAL BIOLOGY</p> <p>This course addresses contemporary environmental issues in a consistent and concerted fashion so as to introduce students to biological concepts. The concepts are developed to the extent needed to inform an understanding of the issues. Three hours lecture and two hours lab per week.</p>	4
ENV145L	<p>LAB: ENVIRONMENTAL BIOLOGY</p> <p>Lab: Environmental Biology</p>	0
ENV147L	<p>LAB: ENVIRONMENTAL GEOLOGY</p> <p>Lab: Environmental Geology</p>	0
ENV208	<p>BACKPACKING: EXPERIENCING THE NATURAL HISTORY OF WESTERN</p> <p>Students learn local land-use and natural history, including soil formation, flora, and some fauna. Also covered are wilderness trip planning and leadership, including principles for minimizing human impacts and conserving outdoor spaces and wilderness heritage. One weekend overnight camping trip is required. Prior</p>	3

Course Code	Course Information	Credits
	completion of 100-level science course is desirable.	
ENV242	<p>WOMEN AND THE GLOBAL ENVIRONMENT</p> <p>This course will examine contemporary global environmental issues from a gendered perspective. It will address the following question: How does environmental change impact women's lives, women's health, women's community roles, and how are women offering leadership to address these problems and offer alternative solutions at the global, national, and local levels? The course will examine these issues from a North/South perspective, examining how northern countries' consumption and policies are impacting women in poor and transitional countries. It will also focus on key environmental concerns, from climate change, resource extraction, population, consumption, and toxic contamination.</p>	3
ENV247	<p>ENVIRONMENTAL GEOLOGY</p> <p>Environmental Geology</p>	3
ENV247L	<p>ENVIRONMENTAL GEOLOGY LAB</p> <p>Environmental Geology Lab</p>	1
ENV250	<p>PLANTS, PEOPLE, AND THE ENVIRONMENT</p> <p>An introduction to the uses of plants by humans. Topics include the form, structure and genetics of plants related to their use as sources of food, shelter, fiber, flavors, beverages, drugs, and medicines. Plant structure and reproduction are studied in lecture and in-class activities with a particular focus on relationships between the plant's structural, chemical, or physiological attributes and the agricultural plant. Agricultural policies will also be discussed. Three hours of lecture per week.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • ENV116 : Global Environmental Challenges • ENV129 : Our Fragile Earth: A Scientific Perspective 	
ENV327	<p>WRITING ABOUT ENVIRONMENTAL SCIENCE</p> <p>This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENG327.</p>	3
ENV327W	<p>WRITING ABOUT ENVIRONMENTAL SCIENCE</p> <p>This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENG327.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • ENV247 : Environmental Geology 	3
ENV451	<p>SOIL SCIENCE</p> <p>Study of soils as natural bodies, media for plant growth, and ecosystem components. Topics include soil morphology and characteristics, composition, formation, conservation, and soil erosion. Physical, chemical, and biological properties of soils are related to the production of plants, the functioning of</p>	3

Course Code	Course Information	Credits
	<p>hydrologic and nutrient cycles, and the protection of environmental quality.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • CHM107 : Chemistry I 	
ENV490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone is an extended project centered on a major; projects may include laboratory or fieldwork, creative work in the arts, advocacy work, or independent research; projects may be conducted in a group setting. Integrative capstones in the interdisciplinary major must be approved by both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENV327W : Writing about Environmental Science 	
ENV491	INDEPENDENT STUDY	1
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
ENV492	INDEPENDENT STUDY	2
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
ENV493	INDEPENDENT STUDY	3
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	

Course Code	Course Information	Credits
ENV498	TUTORIAL: ENVIRONMENTAL STUDIES Tutorial: Environmental Studies	4
ENV499	TUTORIAL: ENVIRONMENTAL STUDIES Tutorial: Environmental Studies	4
EXS101	INTRODUCTION TO EXERCISE SCIENCE This course is designed to provide an overview of the field of exercise science as a discipline and profession. Students will be exposed to methods and techniques employed to develop positive attitudes and habits that support an active lifestyle. Topics of health risk factors and wellness will be explored as they specifically relate to exercise. Possible career choices related to this field will also be discussed.	1
EXS102	FIRST AID AND CARDIOPULMONARY RESUSCITATION A 1-credit lab/lecture course will provide students with an understanding how to recognize and care for a variety of emergent situations, breathing and cardiac emergencies, and provide basic first aid care. Successful completion of written and practical exams will result in BLS certification through the American Heart Association.	1
EXS103	WELLNESS This course is designed to optimize students' wellness. The various dimensions of wellness will be explored and various field trips will be taken over the course of the semester. The dimensions of wellness that will be covered in this course include: Physical, Emotional, Social, Spiritual, and Environmental. This course will provide opportunities to support students' desires to lead a healthy lifestyle. Wellness opportunity resources will be provided to improve overall health.	2

Course Code	Course Information	Credits
	<p>In addition, students will complete self-assessments and document their individual progress within each of the dimensions of wellness stated. This course fulfills a wellness course requirement.</p>	
EXS104	<p>INTRODUCTION TO CAREERS IN ATHLETIC TRAINING</p> <p>This course is designed to provide an overview of the field of athletic training as a discipline and profession. Topics of injury prevention, evaluation, treatment and rehabilitation will be explored as they specifically relate to the profession. Possible career choices related to this field will also be discussed.</p>	1
EXS105	<p>PERSONAL NUTRITION</p> <p>This course explores the various nutrients, their sources, digestion, absorption, and metabolism. Current research and dietary trends are presented against a background of basic nutritional concepts. Special emphasis is given to how nutrition can be emphasized to promote health and health maintenance across the lifespan.</p>	1
EXS106	<p>MOVEMENT FOR LIFE</p> <p>This course will explore the importance of movement throughout the lifespan with a focus on the diverse relationships existing between movement and inflammation, the autonomic nervous system, and nutrition. Emphasis on language precision, other concepts such as movement hierarchy, yoga, meditation, breath and intentionally creating movement habits will be explored.</p>	1
EXS201W	<p>INTRODUCTION TO CRITICAL RESEARCH APPRAISAL</p> <p>This course reviews current research design and statistical techniques needed for a better understanding of peer reviewed literature within exercise science. This course also reviews</p>	2

Course Code	Course Information	Credits
	<p>basic principles of an evidence based approach related to various types of exercise interventions, and common diagnoses and prognoses in the area of public health (e.g., obesity, diabetes). Material presented in lecture will be focused on "real world" data from the current literature.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EXS101 : Introduction to Exercise Science 	
EXS202	<p>EXERCISE AND THE ENVIRONMENT</p> <p>This course will provide students with a basic understanding of how various environmental conditions impact all aspects of health and exercise performance. Topics to be discussed will include: environmental health concerns, air pollution, temperature regulation heat/cold stress, altitude and health, microgravity, and hypobaria. Three hours of lecture per week.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • EXS101 : Introduction to Exercise Science • EXS102 : First Aid and Cardiopulmonary Resuscitation • EXS103 : Wellness 	3
EXS252	<p>EXERCISE AND NUTRITION</p> <p>This course introduces the student to the science of human nutrition and the relationship between health, exercise and food intake. Basic topics of digestion, absorption, metabolism, interaction and functions of nutrients will be covered. Special topics emphasized in this course include optimal nutrition for exercise and sport, energy use during exercise, evaluation of body composition (body fat, muscle mass), development of obesity, weight management, and nutritional factors in planning a successful muscular strength and endurance program.</p>	3
EXS252W	<p>EXERCISE AND NUTRITION</p> <p>This course introduces the student to the science of human</p>	3

Course Code	Course Information	Credits
	<p>nutrition and the relationship between health, exercise and food intake. Basic topics of digestion, absorption, metabolism, interaction and functions of nutrients will be covered. Special topics emphasized in this course include optimal nutrition for exercise and sport, energy use during exercise, evaluation of body composition (body fat, muscle mass), development of obesity, weight management, and nutritional factors in planning a successful muscular strength and endurance program.</p>	
EXS275	<p>MEASUREMENT AND EVALUATION IN HUMAN PERFORMANCE</p> <p>This course provides students with an introduction to measurement and evaluation across all domains in human performance. Common test and measurement techniques in physical fitness, sports performance and motor abilities will be covered and students will practice these techniques on their classmates.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EXS101 : Introduction to Exercise Science 	3
EXS302	<p>PRINCIPLES OF STRENGTH AND CONDITIONING</p> <p>Students learn to integrate anatomical and physiological function into a comprehensive strength and conditioning model. Topics include testing, evaluation, exercise techniques, program design, and aerobic endurance training. Students are introduced to facility organization, risk management, and developing a policies and procedure manual.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab • BIO201 : Anatomy 	3
EXS303	<p>SKELETAL MUSCLE BIOCHEMISTRY</p> <p>This upper level undergraduate course will provide students</p>	3

Course Code	Course Information	Credits
	<p>with a comprehensive examination of the biochemical properties of skeletal muscle within the context of human health and disease. Specific topic areas include control of gene expression and protein synthesis, contraction and substrate utilization, non-muscle tissue interactions and exercise training and adaptations.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab • BIO201 : Anatomy 	
EXS321	<p>PREVENTION AND CARE OF ATHLEIC INJURIES</p> <p>This course is designed to provide entry-level knowledge regarding the prevention and treatment of athletic injuries. This includes the recognition of signs and symptoms of injuries and their care that occur during exercise, physical activity, or athletic participation. Students will earn nationally recognized certification in First Aid, CPR, and AED.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab • BIO201 : Anatomy 	3
EXS326	<p>APPLIED EXERCISE PHYSIOLOGY I</p> <p>This course provides students with the knowledge of theoretical and applied aspects of exercise physiology with an emphasis on exercise response and exercise testing. An in-depth understanding of how the body responds when exposed to acute bouts of exercise will be provided through lectures and laboratories. Topics discussed will include physiological adaptations of the cardiovascular, respiratory, metabolic, and neuromuscular systems in response to exercise, and assessment of aerobic endurance, muscular fitness and body composition. Three hours of lecture per week. CPR and first aid certifications are required.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab • BIO201 : Anatomy 	
EXS326L	LAB: APPLIED EXERCISE PHYSIOLOGY I Experiments to complement the material presented in EXS326. Two hours of laboratory per week. Corequisite: EXS 326. Additional fee(s): Laboratory fee. Co-Requisites: <ul style="list-style-type: none"> • EXS326 : Applied Exercise Physiology I 	1
EXS345	KINESIOLOGY AND MOVEMENT SCIENCE This course serves as an introduction to kinesiology and movement science of the human body. The student will learn the functional anatomy and biomechanics of the major joints of the human body and the application of kinesiology and biomechanical principles to describe and analyze normal and pathological human movement. Principles and practical application of motor learning, motor control and skill acquisition will also be introduced. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of lecture per week. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • BIO116 : Basic Anatomy and Physiology I with Lab • BIO201 : Anatomy Co-Requisites: <ul style="list-style-type: none"> • EXS345LW : Lab: Kinesiology and Movement Science 	3
EXS345LW	LAB: KINESIOLOGY AND MOVEMENT SCIENCE Experiments to complement the material presented in EXS 345. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of laboratory per week. Corequisite: EXS 345. Additional fee(s): Laboratory fee.	1

Course Code	Course Information	Credits
EXS360	<p>EXERCISE AND AGING</p> <p>This course will explore the importance of exercise across the lifespan. Theories of aging, exercise prescription for older adults, and exercise for the prevention and management of chronic disease will be discussed. The role of exercise in the compression of morbidity will be emphasized.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• BIO116 : Basic Anatomy and Physiology I with Lab <li>• BIO201 : Anatomy 	3
EXS385	<p>PATHOPHYSIOLOGY</p> <p>This course provides students with the knowledge needed to understand complex disease processes. The pathophysiology of several acute and chronic diseases will be covered with special attention given to the management and treatment applications in the health sciences.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• BIO117 : Basic Anatomy and Physiology II with lab <li>• BIO302 : Physiology 	3
EXS426	<p>APPLIED EXERCISE PHYSIOLOGY II</p> <p>This course provides students with the knowledge of theoretical and applied aspects of exercise physiology and wellness. The emphasis of this course is on the physiological adaptations to exercise training. Students will learn how to design exercise prescriptions for typical adult populations, athletic populations, and special populations (i.e. pediatric, geriatric, and obese). Three hours of lecture per week.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• EXS326 : Applied Exercise Physiology I <li>• EXS326L : Lab: Applied Exercise Physiology I 	3

Course Code	Course Information	Credits
EXS426L	APPLIED EXERCISE PHYSIOLOGY II LAB	1
	<p>The emphasis of this lab is on the physiological adaptations to exercise training. Students will learn how to design exercise prescriptions for typical adult populations, athletic populations, and special populations (i.e. pediatric, geriatric, obese). Three hours of laboratory per week. Corequisite: EXS 426. Additional fee(s): Laboratory fee.</p>	
EXS490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EXS301W : Introduction to Critical Research Appraisal 	
EXS493	INDEPENDENT STUDY	3
	Independent Study	
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
EXS498	TUTORIAL: EXERCISE SCIENCE	4
	Tutorial: Exercise Science	

Course Code	Course Information	Credits
EXS499	TUTORIAL: EXERCISE SCIENCE Tutorial: Exercise Science	4
FDT150	INTRODUCTION TO DIGITAL VIDEO PRODUCTION Introduction to Digital Video Production introduces the tools, technology, and techniques of digital video production. Students plan and produce videos using digital technologies. Along with the technical application, students are exposed to the history of video as an artistic and instructional medium. Additional Fee(s): Applied laboratory fee.	3
FDT160	WORLD FILM HISTORY This course presents an overview of the history of film by focusing on key countries, both Western and non-Western, whose film industries have made important contributions to world cinema and/or whose filmmakers have pioneered important film movements. The course places film industries and movements in the context both of cinematic history and history of the societies in question.	3
FDT161	INTRODUCTION TO FILM, VIDEO AND NEW MEDIA ART This course is an introduction to critical and aesthetic perspectives on film, i.e. the rules, codes, and strategies by which film represents reality. Students will be exposed to a variety of movements and moments in film history, but history will not be an explicit focus for the course. The course will map out the major conceptual areas in film studies using new methodologies in the areas of narrative comprehension, new vocabulary in film semiotics, and multiculturalism and the media. Issues explored in this course include questions of history and memory, self and other, and identity in both the Western and non-Western contexts.	3

Course Code	Course Information	Credits
FDT200	<p>FINAL CUT PRO X</p> <p>This is a 3-credit course that provides students with a foundational knowledge of Final Cut Pro X. In this hands-on course, students work with practical approaches to video editing, from basic techniques to powerful advanced features.</p>	3
FDT210	<p>STUDIO: ADOBE ILLUSTRATOR</p> <p>This supplemental studio explores the practical applications of today's computer hardware and graphic design software. The focus of the class is on gathering critical knowledge and gaining basic mastery of a powerful design visualization and creative production tool. The studio will cover Adobe Illustrator on the Macintosh platform.</p>	1
FDT213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
FDT220	<p>STUDIO: ADOBE PHOTOSHOP</p> <p>This supplemental studio explores the practical applications of today's computer hardware and graphic design software. The focus of the class is on gathering critical knowledge and gaining basic mastery of a powerful design visualization and creative production tool. The studio will cover Adobe Photoshop on the Macintosh platform.</p>	1
FDT225	<p>FEMALE NARRATION: RACE AND GENDER IN WOMEN'S FILMS</p> <p>This course looks predominantly at films directed by women who have worked out strategies for feminist film practice. The course will focus on the relationship between representations of women and the socio-political structures in which women live. It will also focus on the need for women, if they wish to affect</p>	3

Course Code	Course Information	Credits
	<p>perception of self and other, us and them, to take up the means of production. Exposing the sexual stratagems in various contemporary societies' permits women filmmakers to recreate the world in their own image. Study of traditional portrayals of women will support understanding of the differences between subject and object position. Negotiating these often-conflicting spaces allows students to comprehend the multiple mediations that structure a critical consciousness. Such awareness allows questions of responsibility in a world of diverse values and perspectives. The course is organized as a reading, viewing, and lecture, experience.</p>	
FDT230	<p>STUDIO: ADOBE INDESIGN</p> <p>This one credit supplemental course will provide students with a foundational knowledge of the InDesign interface. Students will learn foundations of InDesign, threading text-boxes, importing photos and styling images, utilize baseline grid, hyphenation, and libraries to create simple and complex layout compositions.</p>	1
FDT267	<p>INTRO TO PODCASTING</p> <p>This course explores the growing medium of podcasting and how it effectively communicates stories in the digital realm. This course introduces students to the history and technology behind audio storytelling and trains students to be active podcast listeners. Students will produce a live podcast series from inception to completion.</p>	3
FDT300	<p>CRITICAL THEORY</p> <p>Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.</p>	3

Course Code	Course Information	Credits
FDT300W	<p>CRITICAL THEORY</p> <p>Critical theory offers a critical study of the key debates in theories of media and communication interfaced with cultural studies. This course also examines the communication circuit from production to consumption within the broader paradigms of cultural studies, feminism, politics of identity, and theories of ideology and postmodernism. Connections are made between these debates and wider debates in communication studies.</p>	3
FDT313	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
FDT350	<p>INTERMEDIATE DIGITAL VIDEO PRODUCTION STUDIO</p> <p>Intermediate Digital Video Production further examines methods of production that were presented in the introductory course. Lighting and audio production are introduced to strengthen creative projects. Students synthesize what is provided in the classroom and what is discovered in the field to create meaningful, expressive work.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • ART150 : Introduction to Digital Video Production • COM150 : Introduction to Digital Video Production • FDT150 : Introduction to Digital Video Production 	3
FDT421	<p>DIGITAL ANIMATION AND COMPOSITING</p> <p>This production course introduces computer animation and visual effects. Students learn the principles, processes, and philosophy of animation with a focus on the design and construction of environments, characters, and time-based motion. Students script, storyboard, design, and produce a short animated digital video. Additional Fee(s): Applied</p>	3

Course Code	Course Information	Credits
	<p>laboratory fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FDT150 : Introduction to Digital Video Production 	
FDT450	<p>ADVANCED DIGITAL VIDEO PRODUCTION STUDIO</p> <p>Advanced Digital Video Production is an intensive studio course that looks at advanced methods of digital video production including highly developed lighting practices, audio recording and mixing, nonlinear editing, and digital effects.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • ART350 : Intermediate Digital Video Production • COM350 : Intermediate Digital Video • FDT350 : Intermediate Digital Video Production 	3
FDT469	<p>ADVANCED VISUAL EFFECTS</p> <p>This course provides an advanced study in developing and executing visual effects for live action films. The course explores the history of special and visual effects by studying practical special effects that can be accomplished in camera, introducing color correction and grading, and mastering the advanced functions of Adobe After Effects as it pertains to live action visual effects.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FDT421 : Digital Animation and Compositing 	3
FDT490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to</p>	3

Course Code	Course Information	Credits
	<p>meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FDT300W : Critical Theory 	
FDT491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
FDT493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
FDT498	<p>TUTORIAL</p> <p>Tutorial</p>	4
FDT499	<p>TUTORIAL</p> <p>Tutorial</p>	4
FDT500	<p>LAB: FINAL CUT PRO X</p> <p>This is a 2-credit supplemental course that will provide students with a foundational knowledge of Final Cut Pro X. In this hands-on course, students work with practical approaches to video editing, from basic techniques to Final Cut Pro's powerful advanced features. This is an Apple Certified Training Course.</p>	2

Course Code	Course Information	Credits
Additional Fee(s): Course Computing LAB Fee.		
FDT510	LAB: ADOBE ILLUSTRATOR	1
<p>This one credit supplemental lab explores the practical applications of today's computer hardware and graphic design software. The focus of the class will be on gathering critical knowledge and gaining basic mastery of a powerful design visualization and creative production tool. The lab will cover one of the essential design applications: Adobe Illustrator on the Macintosh platform.</p>		
FDT520	LAB: ADOBE PHOTOSHOP	1
<p>This one credit supplemental lab explores the practical applications of today's computer hardware and graphic design software. The focus of the class will be on gathering critical knowledge and gaining basic mastery of a powerful design visualization and creative production tool. The Lab will cover one of the essential design applications: Adobe Photoshop on the Macintosh platform.</p>		
FDT530	INDESIGN LAB	1
<p>This one credit supplemental course will provide students with a foundational knowledge of the InDesign interface. Students will earn foundations of InDesign, threading text-boxes, importing photos and styling images, utilize baseline grid, hyphenation, and libraries to create simple and complex layout compositions</p>		
FDT543	THE MEDIA PRODUCTION INDUSTRY	3
<p>This course is offered in the final semester of the program and is designed to enhance the ability of graduates to establish themselves in the media production industry.</p>		

Course Code	Course Information	Credits
FDT550	<p>MEDIA PROJECT I: DIGITAL VIDEO PRODUCTION</p> <p>Media Project I introduces the production process for digital video and other media work, from concept to production to completed piece. This course provides an understanding of the tools for each step of production and students focus on the technical elements of shooting and editing video.</p>	3
FDT563	<p>MEDIA CONTEXTS I: MEDIA HISTORY</p> <p>Provides overview for incoming graduate students of current rhetorical concerns related to independent media, film production, and histories.</p>	3
FDT571	<p>E-MERGING MEDIA I</p> <p>Maps ways the web can be utilized for the production of alternative narratives. Enables students to analyze and create works online using web-cams, streaming media, and interactive web-based projects. Additional fees: Course Computing fee</p>	3
FDT613	<p>SPECIAL TOPICS</p> <p>Special Topics Class</p>	3
FDT641	<p>THE CRAFT OF SCREENWRITING</p> <p>Provides a focus on the art and craft of Screenwriting. Students will read and study contemporary Screenwriting, and will be expected to generate creative work that illustrates a deep understanding of the literary tools available to filmmakers in this genre.</p>	3
FDT650	<p>MEDIA PROJECT II: ADVANCED DIGITAL VIDEO PRODUCTION</p> <p>The course expands on the knowledge gained in Media Project</p>	3

Course Code	Course Information	Credits
FDT663	<p>I and focuses on the nonlinear editing process. Students develop their existing foundational software knowledge, learn to navigate additional NLE systems used by the industry, and have the opportunity to explore how these programs can enhance traditional editing techniques.</p> <p>MEDIA CONTEXTS I: THEORY</p> <p>Analyzes the aesthetic conventions, narrative, and formats of new media, as well as the impact digital technologies have had on existing media.</p>	3
FDT666	<p>In this course, students will focus on the skills required to make appropriate camera and lighting decisions under a variety of field and studio situations. Students will gain mastery of advanced concepts and principles of camera operation, camera movement, use of lenses, composition and lighting techniques used in digital filmmaking.</p> <p>CINEMATOGRAPHY AND LIGHTING</p>	3
FDT667	<p>In this audio production course, students will advance their audio knowledge and production abilities in sound design through sound recording, mixing, processing and editing. Students will learn how to assemble a pre-dub or temp mix, group and sub-mix tracks into the final dub that is for distribution and delivery.</p> <p>ADVANCED SOUND DESIGN AND AUDIO POST PRODUCTION</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• FDT675 : Media Project III: Advanced Sound Production 	3
FDT671	<p>Focuses on the technical through advanced study. Students will produce DVD, CD-ROM, and other interactive projects.</p> <p>EMERGING MEDIA II: ADVANCED WEB DESIGN</p>	3

Course Code	Course Information	Credits
	Additional Fees: Course Computing Fee	
FDT675	<p>MEDIA PROJECT III: ADVANCED SOUND PRODUCTION</p> <p>Focuses on advanced sound recording, editing, and mixing technologies using Pro Tools digital audio workstation. Additional Fee(s): Course Computing fee</p>	3
FDT676	<p>MEDIA PROJECT IV: VISUAL EFFECTS & ANIMATION MODES</p> <p>Extends to visual effects, animation modes and compositing. Students will utilize this course to develop their masters' thesis topic and begin pre-production processes. Additional Fee: Course Computing Fee</p>	3
FDT677	<p>MEDIA PROJECT V</p> <p>The mastery of written, oral, and production components: a self-directed project with an approved thesis topic generated by individual student interest. The final project is completed under joint guidance of the class instructor and an outside advisor. Additional Fee: Course Computing Fee</p>	6
FDT683	<p>INTERNSHIP</p> <p>Internship</p>	3
FDT692	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2

Course Code	Course Information	Credits
FDT693	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
FDT698	<p>PORTFOLIO</p> <p>The MA Portfolio is the final requirement for the MA degree. The Portfolio project must demonstrate the student's aesthetic, conceptual, and technical skills along with a strong personal artistic voice from the initial concept to the completed 15 minute short film. Additional fee(s): Applied laboratory fee</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FDT550 : Media Project I: Digital Video Production • FDT650 : Media Project II: Advanced Digital Video Production 	3
FDT699	<p>MFA THESIS</p> <p>The MFA Thesis is the final requirement for completion of the MFA degree. Students will demonstrate the aesthetic, conceptual, intellectual, and technical skill in a research based written thesis and a 22-to-32 minute exhibition ready film. The thesis project must demonstrate advanced written and production skills. Additional fee(s): Applied laboratory fee.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FDT663 : Media Contexts I: Theory • FDT698 : Portfolio 	6
FDT800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
FST150	<p>FOOD, FARM & FIELD</p>	3

Course Code	Course Information	Credits
	This course explores food, farm, and environment through readings, films, lectures, demonstrations, field trips, and on-farm and kitchen experiences in research and production problems. Activities include presentations on specific topics, group discussions, hands-on lab and field activities, individual and group presentations, field trips, and reflection through writing, video, and photography.	
FST205	FOOD SCIENCE PRINCIPLES AND PRACTICE Through didactic and experiential learning, students explore the physical, biological, and chemical makeup of food and how final products are influenced by food processing. Students identify the changes to food caused by storage and cooking methods and apply food science concepts to risk and prevention of foodborne pathogens.	3
FST213	SPECIAL TOPICS Special Topics	3
FST215W	GLOBAL FOODWAYS Course is focused on the global history and nature of food traditions, cuisines, and cultures, from the Columbian Exchange to globalization, with a depth analysis of one region, country, or time frame. Emphasis on the division of labor, colonialism, conquest, power, and continuity and change in social and economic systems.	3
FST234	ASIAN FOODWAYS A strategic survey of Japanese, Chinese/Taiwanese, Korean, and South Asian food ways in their originating contexts and the U.S. Emphasis on anthropological understanding of food ways, cultural studies critique of class, gender, and family dynamics articulated via food, and historical transformations of food culture in response to migration and globalization.	3

Course Code	Course Information	Credits
FST250	<p>INTERNATIONAL CUISINE</p> <p>This course explores international cuisine and culture through an interdisciplinary lens. Focusing on culinary history, the course emphasizes knowledge of global culture and cuisine. One of the featured regions of study will align with Chatham's "Global Focus" for the academic year.</p>	3
FST302	<p>NUTRITION AND COMMUNITY</p> <p>This course focuses on North American community-based nutrition research, programs and policies. Students become familiar with community-based research, programs, and policies where nutrition plays a role. Using public health nutrition and community asset building, it includes an introduction to grant writing, evaluation, and assessment to support community health programs.</p>	3
FST307W	<p>COMMUNITY AND FOOD</p> <p>Through experiential learning and field work, this course explores the intersections between food and community. Global and regional food systems are "felt" at the level of community and communities often create the organization of agriculture and food. Students will practice applied work with community, government, nonprofit, activist, and business groups.</p>	3
FST315	<p>FOOD ACCESS AND POLICY</p> <p>If food is a basic human right, how do societies create universal access to food? This course explores the ethical basis for making citizens food secure despite global inequality. Major topics include private vs. public solutions and the relationship between food access, gender, cultural appropriateness, nutrition, sustainability, and justice.</p>	3

Course Code	Course Information	Credits
FST320	<p>BASIC AGROECOLOGY</p> <p>Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	3
FST320L	<p>GROWING SUSTAINABLY LAB</p> <p>Through working with Chatham's Eden Hall Farm as well as visiting neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in classes. Topics will include basic principles of soil fertility, biodiversity, greenhouse production, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	1
FST342	<p>SUSTAINABLE PRODUCTION</p> <p>Course explores specific modes of production, agricultural and culinary, with a focus on applied and experiential learning through practical application in a group project. Students focus on farm to kitchen and develop problem solving skills for practical applications, including plant and crop production and culinary product development.</p>	3
FST345	<p>APPLIED AGRICULTURAL EXPERIENCE 1</p> <p>Course explores specific modes of agricultural production with a focus on applied and experiential learning. Students focus on farming competencies and develop problem solving skills for practical applications in agricultural and food enterprises. Focus is on basic crop production, animal care, pasture management, and woody plants.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	<p>Complete the following course:</p> <ul style="list-style-type: none"> • FST320 : Basic Agroecology 	
FST345L	<p>APPLIED AGRICULTURAL EXPERIENCE LAB 1</p> <p>Course focuses on repeated practice and skill development with specific modes of agricultural production, as complement FST345. Students focus on farming competencies and develop problem solving skills for practical applications in agricultural and food enterprises. Focus is on basic crop production, animal care, pasture management, and woody plants.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST320 : Basic Agroecology 	2
FST365	<p>COFFEE: HISTORY, POLITICS, PRACTICES</p> <p>This course includes hands on and practical experiences at local coffee roasters with different business models. Participants train in the Eden Hall student cooperative cafe at Eden Hall including cupping, barista, and tasting skills. The correlated readings and assignments address challenging issues surrounding coffee, including labor, global procurement, and labeling.</p>	3
FST370	<p>APPLIED CULINARY EXPERIENCE 1</p> <p>This course focuses on applied kitchen-based research that confronts real-world food systems problems in the areas of recipe and product development, purchasing and cost controls, and menu management. Culinary techniques and philosophies such as preserving the harvest, fermentation, and reduced-waste cooking will be practiced.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST205 : Food Science Principles and Practice 	3
FST370L	<p>APPLIED CULINARY EXPERIENCE LAB 1</p>	2

Course Code	Course Information	Credits
	<p>Throughout this lab course students receive course work and hands-on experience that is culinary, and hospitality focused using experiential based learning as we investigate how to navigate a more equitable and sustainable food system. The themes of food preservation, dairy skills, and grains will be a focus.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST205 : Food Science Principles and Practice 	
FST402	<p>GLOBAL AGRICULTURE</p> <p>This multi-disciplinary course examines agro-ecological, socio-economic, and political issues in tropical agriculture in the global South, focusing on how production and consumption impact food, agriculture, and community sustainability. The course centers on a two-week visit to EARTH University in Costa Rica, plus pre- and post-trip sessions in Pittsburgh.</p>	3
FST417	<p>SAFE PRACTICES IN FOOD AND AGRICULTURE</p> <p>This course offers professional knowledge about safe practices in agriculture and food production, such as safe food handling, worker safety, best practices for agricultural markets, and overviews of regulatory organizations. Students will follow practicum materials to gain both food safety certification and good agricultural practices standing.</p>	1
FST420	<p>BASIC AGROECOLOGY</p> <p>Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	3

Course Code	Course Information	Credits
FST420L	GROWING SUSTAINABLY LAB	1
	<p>Through working with Chatham's Eden Hall Farm as well as visiting neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in classes. Topics will include basic principles of soil fertility, biodiversity, greenhouse production, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	
FST428	TREE CARE	3
	<p>Tree care skills are integral to sustainable land and food system management. This course provides an introduction to arboriculture, tree climbing and pruning. It will teach proper tree pruning, basics of climbing, and basic equipment safety, applicable to tree work in urban or agricultural settings.</p>	
FST446	APPLIED AGRICULTURAL EXPERIENCE II	3
	<p>This course explores specific modes of agricultural production with a focus on applied and experiential learning. Students focus on farming competencies and develop problem solving skills for practical applications in agricultural and food enterprises. Focus is on greenhouse production, specialty products, livestock care, and early spring planting.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST320 : Basic Agroecology 	
FST446L	APPLIED AGRICULTURAL EXPERIENCE II LAB	2
	<p>Course focuses on repeated practice and skill development with specific modes of agricultural production. Students focus on farming competencies and develop problem solving skills for practical applications in agricultural and food enterprises. Focus is on greenhouse production, specialty products, livestock care, and early spring planting.</p>	

Course Code	Course Information	Credits
FST471	<p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• FST320 : Basic Agroecology <p>APPLIED CULINARY EXPERIENCE 2</p> <p>This course focuses on kitchen-based research that confronts real-world food systems problems in the areas of product development, purchasing and cost controls, and menu management. Hands-on culinary and hospitality focused experiences using experiential based learning aid in investigating how to navigate a more equitable and sustainable food system.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• FST205 : Food Science Principles and Practice 	3
FST471L	<p>APPLIED CULINARY EXPERIENCE LAB 2</p> <p>Throughout this lab course students receive course work and hands-on experience that is culinary, and hospitality focused using experiential based learning as we investigate how to navigate a more equitable and sustainable food system. Both hyper-local foods and global commodities (such as chocolate, coffee and tea) will be explored.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• FST205 : Food Science Principles and Practice 	2
FST502	<p>ESSENTIAL READINGS IN FOOD AND AGRICULTURE</p> <p>This class provides grounding in essential texts in the contemporary understanding of food and agriculture. Readings include key food histories, journalism, critical nutrition and food industry writers, and agriculture and environmental treatise. Class will meet monthly to analyze texts. Students will contribute to forum and blog discussions throughout the year.</p>	1

Course Code	Course Information	Credits
FST503	<p>URBAN AGRICULTURE</p> <p>The Urban Agriculture course focuses on the practices and models of urban agriculture in a variety of different global contexts with an emphasis on Pittsburgh, PA. The course uses a lens of political ecology to understand the historical, cultural, ecological, and political factors that influence the practice of urban agriculture.</p>	3
FST504	<p>FOOD SCIENCE PRINCIPALS</p> <p>We will study scientific literature on nutrient availability before and after cooking, learn about chemical and physical and visual changes to food through various storage and cooking methods and investigate our sensory responses to certain foods in various types of physical and cultural settings.</p>	3
FST505	<p>FOOD AND REPRESENTATIONS</p> <p>Food is elemental to survival, culture, home, and subjectivity - to rituals of love, loss, and celebration. Focusing on representations of food and eating in spiritual narratives, epic texts, myth, novels, and film, this class examines the cultural work food performs along with the varying meanings assigned to food and eating.</p>	3
FST508	<p>FOOD SYSTEMS</p> <p>Examines philosophical, sociological, economic, and cultural issues related to the production and consumption of food. From Agrarianism to the Green Revolution, explores the transformations of industrialization, technology, and migration. Provides foundation in food systems and commodity chains as concepts and methodological tools for uncovering the relationship between communities, agriculture, markets, and consumers.</p>	3

Course Code	Course Information	Credits
FST509	<p>FOOD ACCESS</p> <p>If food is a basic human right, how do societies create universal access to food? What is the moral ethical basis for making citizens food secure in an age of global inequality? To what extent does providing food access need to consider culturally appropriateness, nutrition, and sustainability, and justice?</p>	3
FST510	<p>FOOD, CULTURE, HISTORY</p> <p>Provides an overview of food and diet in transnational history, emphasizing cultural impact of modernity of food gathering, farming, plant biology, the body and consumption, health, taste, and cuisine. Topics include the development of agriculture, the causes of famine, the disruptions of colonialism, global exchange, industrialization, migration, and commercial economic dominance of the food system.</p>	3
FST511	<p>RESEARCH METHODS</p> <p>Introduction to social science research methods applicable to the study of food and culture. Practicum includes ethnography, interviews, focus groups, survey research, oral history, textual analysis, cultural mapping, and visual methods. Applied approach to research: students will produce data for practical use in existing community or commercial projects.</p>	3
FST512	<p>PRACTICAL NUTRITION</p> <p>Course provides an overview of nutrition as an evidence-based research field, focusing on groups and communities where research is conducted and then applied. Topics include science and politics of food categories; supplements and functional foods; weight and disordered eating, commercial, local, organic, and conventional foods; cuisine, culture, and diet.</p>	3
FST513	<p>INTEGRATED SEMINAR IN APPLIED AND</p>	3

Course Code	Course Information	Credits
	<p>ENVIRONMENTAL MICROBIOLOGY</p> <p>This course will provide a forum for interdisciplinary learning and discussion in the core areas of applied and environmental microbiology. Students will analyze case studies based on real-world issues, use evidence-based practice to devise solutions to applied problems, and develop communication skills to convey disciplinary knowledge to different audiences.</p>	
FST514	<p>WINE, CIDERS AND MEADS</p> <p>This course provides a detailed study of wines, grape varieties, ciders and mead. Offers an exploration of global wine regions and regional traditions for ciders and meads. Experiential components utilize local fruits and honey to produce experimental batches of wines and meads. Includes lab at Eden Hall and fieldwork component.</p>	3
FST515	<p>WRITING ABOUT FOOD</p> <p>Students will develop technique and skills for writing about food and culture by studying ethics; journalism; advertising, multimodal and new technology venues; recipe writing; food criticism; writing about food in a variety of genres from history to fiction, magazines, and websites. Course emphasizes both print and online media.</p>	3
FST518	<p>BUSINESS OF FOOD AND AGRICULTURE</p> <p>In this class the student will learn both history and current practices related to food and agriculture as economic enterprises in the United States and the world. Skills include ability to understand strategic management principles including identifying target markets, niche marketing, SWOT analysis and diffusion of innovation theory. Students will be able to develop a business plan including understanding barriers of entry, compiling demographic data, developing feasibility studies, long and short term business goals, define and calculate a</p>	3

Course Code	Course Information	Credits
	<p>breakeven point, and budget formulation.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST508 : Food Systems <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST509 : Food Access • FST509 : Food Access 	
FST520	<p>BASIC AGROECOLOGY</p> <p>Through working on Chatham's Eden Hall Campus farm as well as neighboring farms, students will integrate best practices for sustainable agriculture with theory encountered in class. Topics will include basic principles of soil fertility, biodiversity, agriculture history, effects of both conventional and organic agriculture, and the politics surrounding the issues.</p>	3
FST520L	<p>GROWING SUSTAINABLY LAB</p> <p>This course is a co-requisite to FST520, Growing Sustainably, and comprises the experiential lab component of the course. Students will engage in sustained research on sustainable agricultural projects, from biodynamic methods to soil or pest management comparatives. Course may be taken up to four times for credit.</p>	1
FST521	<p>INTEGRATIVE ANIMAL CARE AND MANAGEMENT</p> <p>This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and policy issues in livestock management. Key themes include: comfort and behavior of live animals; grass- and grain-based animal production; animal (and social and human) nutrition; livestock care; animal (and human) welfare; history of animal production; food safety.</p>	3

Course Code	Course Information	Credits
FST522	GIS: FOOD AND AGRICULTURE	3
	<p>This course provides students with a solid foundation of the principles and applications of GIS, an introduction to the desktop software ArcGIS, and demonstrates its use in the public sectors related to food, agriculture, and resource use. Students will have the flexibility to focus on their particular area of interest through project work.</p>	
FST524	GREENHOUSE PRODUCTION	3
	<p>Students will explore alternative season extension practices used in cold season production and compare the opportunities available to local farmers who choose to adopt season extension practices. Through class lectures and assignments students will learn the essentials of healthy soil, pest and disease identification, planting, harvesting and marketing opportunities available to sustainable farmers. Through working on Chatham's Eden Hall Farm as well as neighboring farms, students will integrate best practices for sustainable greenhouse growing with theory presented in class.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST520 : Basic Agroecology 	
FST527	PERMACULTURE	3
	<p>Course explores natural systems, aboriginal knowledge and best practices for designing human systems, which reflect care of the earth. It integrates findings of agriculture, horticulture, ecology, alternative energy, community design and green building. Students learn methods of growing and living sustainably, with local examples and applications of permaculture design for Eden Hall.</p>	
FST528	TREE CARE	3
	<p>This course provides an introduction to arboriculture, tree</p>	

Course Code	Course Information	Credits
	<p>climbing and pruning. The class will teach proper tree pruning and the basics of climbing, as well as basic equipment safety, applicable to tree work in urban or agricultural settings, and an introduction to work as an arborist.</p>	
FST530	<p>SUSTAINABLE GASTRONOMY</p> <p>This course covers the history of cooking as a profession and a skill set. Emphasis on gastronomy and culinary arts as both integrative creative enterprises and structured labor in specific contexts. The history of public cooking and dining, restaurants, communication of culture and cuisine, and procedures will be covered.</p>	3
FST531	<p>SUSTAINABLE FERMENTATION</p> <p>Through hands-on production, tastings, lectures, students learn basics of fermentation, winemaking principles and practices, sensory evaluation through tastings, viticulture history, wine regions and types, winemaking methods, chemistry and winery operations. Local production includes root beer, beer, sake, local mead and vinegar. Emphasis will be on sustainable viniculture practices and local/global links.</p>	3
FST532	<p>SUSTAINABLE MEAT PRODUCTION</p> <p>As part of sustainable agriculture and culinary knowledge, understanding meat production outside the conventional large scale processing facilities is a critical skill for students who will work with restaurants, farm markets, and other distribution venues.</p>	3
FST534	<p>LEARNING THROUGH FOOD</p> <p>This course explores theoretical frameworks and instructional approaches relevant to describing and supporting the ways people learn through experiences with food. This course covers the fundamentals of sociocultural and experiential learning</p>	3

Course Code	Course Information	Credits
	theories and associated instructional philosophies to help students develop their identities as food educators.	
FST540	<p>ORCHARD SYSTEMS: FOCUS ON TREE FRUIT</p> <p>Focusing on field experiences, this course explores tree fruit orchard production. Students will explore historical, cultural, agronomic, economic, and geopolitical aspects of tree fruit in a large orcharding region; gain hands-on experience in a mainstream industrialized sector of agriculture; and wrestle with complex questions regarding the contours of sustainability.</p>	3
FST575	<p>FIELD ECOLOGY</p> <p>The goal of this course is to introduce the students to the principles of ecology in urban and rural environments. Initially there will be a series of lectures to study ecological concepts, with extensive reading and discussion from the primary literature. The students will gain the understanding of how the physical environment, global cycles and climate influence the biogeographical distribution of global and regional ecosystems and local microhabitats. Lectures will focus on the physical environment, plant and animal adaptations, population ecology and community dynamics. One-half of the classes will consist of field trips to observe flora and fauna, practice plant and animal data collection techniques using standard field methods, and to study human ecology and the impacts of population growth and resource consumption.</p>	3
FST591	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
FST592	INDEPENDENT STUDY	2

Course Code	Course Information	Credits
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
FST593	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
FST600	<p>ORAL HISTORY INTENSIVE</p> <p>This course is a practicum designed to allow students intensive experience conducting oral history. It presumes a basic knowledge of research methods and is meant to provide a platform for exploring voice, history, and experience as key issues in the study of food, agriculture, and society. Students will produce three oral history interviews and participate in on-line and in-person discussions of technique, theory, and function.</p>	1
FST602	<p>GLOBAL AGRICULTURE</p> <p>Examines how contemporary agricultural era is characterized by the simultaneous existence of radically different farming systems within the same region. Course explores prior examples historically and regionally. Focus is then on what makes the contemporary agricultural age different, including respect for 'traditional' approaches as viable 'alternatives'; social and scientific research supporting alternatives; farmers/practitioner awareness of options ;and consumer-citizens driven awareness and advocacy.</p>	3
FST603	<p>FOOD JOURNEYS</p>	3

Course Code	Course Information	Credits
	<p>From the Columbian Exchange to eco-tourism food travels the world, the traveler journeys through food, and the citizen consumes place and goods in a journey towards selfhood. This course examines food and geographic movement with an applied emphasis on culinary tourism and writing about food in global and local contexts.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST509 : Food Access 	
FST605	<p>FOOD AND CLIMATE CHANGE</p> <p>This course considers the relationship between Earth's changing climate and the human production and consumption of food. With attention to current theories and case studies, students will develop a comprehensive understanding of food systems in relation to global environmental change, with a specific focus on livelihoods, adaptation, sustainability, and justice.</p>	3
FST607	<p>SUSTAINABLE CONSUMPTION</p> <p>Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores 3 viewpoints: consumers', including eating behaviors, access and marketing; growers' and producers', including supply chain concerns and food safety; and the institutions' or food business' challenges of incorporating regionally and sustainably sourced food in their operations.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST508 : Food Systems <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST509 : Food Access • FST509 : Food Access 	3

Course Code	Course Information	Credits
FST608	<p>CULTURE AND CULINARY GRAINS</p> <p>Culture and Culinary Grains</p>	3
FST609	<p>DAIRY: FROM PASTURE TO PLATE</p> <p>This multi-disciplinary graduate course examines a range of agro-ecological, philosophical, socio-economic, health, and political issues related to dairy production in the US. Key course themes include: dairy history; sustainable and conventional production; raw milk and consumption debates; livestock care; milking; cheese-making; dairy policy; international issues; and popular representation of dairy.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• FST508 : Food Systems <li>• FST509 : Food Access <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• FST508 : Food Systems <li>• FST509 : Food Access 	3
FST611	<p>RELIGION, COMMUNITY, AND FOOD</p> <p>This course explains the ways in which sustainability and communal religious life have intersected in the U.S. from the 17th century to the present. Using lecture readings, film, and independent research, we will study ethical farming practices, food sustainability, and moral food choices through the lens of American religious communities.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• FST508 : Food Systems 	3
FST612	<p>FOOD, COMMERCE, AND CULTURE IN JAPAN</p> <p>Combined with field experiences, this course explores food and culture in commercial and domestic settings in a specific global site, to be determined each summer. Classroom work and field</p>	3

Course Code	Course Information	Credits
	<p>experiences will explore historical, cultural, economic, and geopolitical aspects of food in that site. Topics include: food and national identity, food and globalization, food and economic sustainability.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST508 : Food Systems 	
FST613	<p>COMMUNITY RESEARCH: FOOD AND HEALTH</p> <p>Research focused on community needs, health and wellness issues, and the relationship between food access, agriculture, and food production. Participation in a pre-selected research study that aims to address some component of health, food access, agriculture, and cooking. May include: engaging relevant community agencies; recruitment of subjects; screening subjects for risk; adhering to IRB regulations; data collection and data entry, aiding in teaching a risk reduction class, participating in the urban garden, and coordinating cooking demonstrations.</p>	1
FST614	<p>NEW PRODUCT DEVELOPMENT</p> <p>This course will explore the new product development process from ideation to market. Students will study the methodologies and practices of product development in a traditional Consumer Packaged Good firm and apply modified methods to manage the new product development process for a start-up local distiller. Over the course of an academic year, students will develop and bring to market a liqueur to be sold by Pittsburgh Distilling Co.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • FST531 : Sustainable Fermentation 	3
FST615	<p>FOOD, LABOR, AND INEQUALITY</p> <p>In this course, we will focus on theoretical and applied</p>	3

Course Code	Course Information	Credits
	<p>frameworks for thinking about the labor of growing food, transporting it, transforming it into comestibles, and finally, serving and cleaning related to food consumption. The course considers how global labor shapes the availability and appropriateness of food for different populations and therefore includes a substantial analysis of gender, race, and social class. Readings and discussion will touch on migrant labor, domestic cooking, waiting and serving, agriculture, cooks and chefs, and food professionals.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST508 : Food Systems 	
FST616	<p>CULTIVATING THE MIDWEST: CORN AND SOYBEANS</p> <p>Combined with field experiences in western Minnesota, this course explores food and agriculture in the Midwestern U.S. Classroom work and field experiences will explore historical, cultural, agronomic, economic, and geopolitical issues, including corn and soybean production, processing and distribution, alternative agrifood networks, and other food systems issues in the Midwest.</p>	3
FST620	<p>RESEARCH IN FOOD AND AGRICULTURE</p> <p>This course assists students developing a research, educational, public policy, or advocacy project in sustainable farming. Participants study a practical and current sustainable food and/or farming problem, review the literature related to the problem, develop management tactics and strategies to address the problem, and communicate their conclusions. Goal is to develop a research plan and project outcomes for a Masters thesis or project.</p>	2
FST621	<p>APPLIED METHODS</p> <p>This course is designed to help the student deepen their facility</p>	1

Course Code	Course Information	Credits
	with qualitative and/or quantitative research methods to better understand diverse issues in the interdisciplinary field of food studies. The student will design, conduct, and/or analyze research as part of a thesis or other large project.	
FST622	<p>ADVANCED NEW PRODUCT DEVELOPMENT</p> <p>This course explores new product development process from ideation to market. Students study methodologies and practices of product development in a Consumer Packaged Goods firm. Focus for the advanced course includes consumer testing, packaging development, and production process to develop and bring to market a liqueur sold by Pittsburgh Distilling.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• FST531 : Sustainable Fermentation <li>• FST614 : New Product Development 	3
FST624	<p>CHOCOLATE: POLITICS AND PLEASURE</p> <p>This course will explore chocolate as a global product including history and culture, agriculture (growing trees, processing beans), direct/fair trade, labor and justice, health, chocolate production, sales, marketing, and sustainability. Experiential components include chocolate making, tempering; culinary practices, and site visits to chocolate manufacturers, culminating in the design and marketing of a sustainable chocolate product.</p>	3
FST625	<p>U.S. AGRICULTURAL POLICY</p> <p>This graduate multi-disciplinary course examines a range of philosophical, socio-economic, health and political issues related to agricultural policy in the US. It provides a foundation and introduction to U.S. farm policy as a means of exploring how political dynamics and choices impact the nature of food, agriculture, and communities at local, national and global scales.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST508 : Food Systems 	
FST640	<p>SUSTAINABLE COMMUNITY DEVELOPMENT</p> <p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST509 : Food Access • SUS504 : Introduction to Sustainability and Systems 	3
FST683	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
FST691	<p>INTERNSHIP</p> <p>Internship placement will focus on local nonprofits, advocacy group, community projects, food companies, farms, co-ops, food producers, and policy agencies. Directed experience can include developing products, community knowledge, food system data, or promotional materials (course requires instructor signature).</p>	1
FST692	<p>INTERNSHIP</p> <p>Internship placement will focus on local nonprofits, advocacy group, community projects, food companies, farms, co-ops, food producers, and policy agencies. Directed experience can</p>	2

Course Code	Course Information	Credits
	include developing products, community knowledge, food system data, or promotional materials (course requires instructor signature).	
FST693	<p>FIELD WORK PRACTICUM</p> <p>Students engage in semester long field work and internships. Class meetings address ethical, logistical, and intellectual issues of community-based work in Food Studies. Site-based project development and implementation occurs in supervised and collaborative settings. Individual meetings with professor provide career development and advance research proposal skills.</p>	3
FST697	<p>THESIS PRACTICUM</p> <p>Thesis Practicum is intended to assist Masters students in the preparation of thesis and to facilitate the transition from research and project development to writing. This course will review research methods and design, literature review, time management demands, project management, and presentation skills.</p>	1
FST698	<p>THESIS/PROJECT</p> <p>Course provides supervision and research guidance for Masters thesis or projects in Food Studies. Students will have instruction in data analysis, writing for public presentation and publication, professional development workshops, and community development issues.</p>	1
FST800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
GST490	INTEGRATIVE CAPSTONE	3

Course Code	Course Information	Credits
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • EDU323W : Educational Research Methods 	
HCA500	<p>DATA LITERACY AND ANALYTICS</p> <p>This course provides students the opportunity to master data literacy skills needed to participate in and contribute to a data-driven culture. Through analysis and appropriate visualization of data, students will effectively communicate data as information to influence decisions for targeted performance improvement areas. Students will engage in story telling using data.</p>	3
HCA501	<p>ANALYTICS LEADER</p> <p>This course provides students the opportunity to strengthen basic skills and knowledge in using data to make decisions. Leadership skills addressing interprofessional communication, strategic thinking and persuasive motivation will be discussed. Students will engage in activities which advance their ability to use technology and information systems to influence outcomes and improve overall quality.</p>	3
HCI502	<p>HEALTHCARE DELIVERY SYSTEMS</p> <p>In this course, students will be engaged in dynamic content to gain an understanding of the role of information systems within</p>	3

Course Code	Course Information	Credits
	healthcare delivery. The course provides an introduction to the use of information technology, information systems, data, and informatics in regards to health care delivery system entities and functions.	
HCI503	<p>INFORMATICS FOUNDATION AND HEALTH CARE TECHNOLOGY</p> <p>This course will assist students to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various settings. Student will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p>	3
HCI504	<p>PROJECT MANAGEMENT</p> <p>Explores project management from a strategic perspective, focusing on the development of leadership skills and evidence-based decision making. Explores management techniques of various business projects including project estimation, fiscal management, continuous quality improvement, and diverse project management tools. Specifically delves into use of information technology to improve healthcare outcomes.</p>	3
HCI505	<p>FOUNDATIONAL DATA ANALYTICS</p> <p>This course explores data literacy, visual literacy and how outcomes are dependent upon the integrity of data, the analysis of data and the need for clearly defined report writing. Students will manipulate data for analysis and interpretation in order to effectively conduct and/or contribute to data analytics projects.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• HCI651 : Database Management for Evidence-Based Decision Making 	3

Course Code	Course Information	Credits
HCI506	<p>HEALTH POLICY AND INFORMATICS</p> <p>This course will explore health care policy and how it relates to informatics. Students will describe the history and development of health care policy while comparing U.S. health care policies to other countries. Legal, privacy, storage, and security issues will be discussed regarding healthcare and genomic data.</p>	3
HCI507	<p>INFORMATICS IMMERSION</p> <p>This course leads students to combine management and technical skills to solve real problems regarding healthcare information systems and use of technology in a healthcare setting. The immersion project requires the application of principles in health systems, information technology, healthcare delivery and project management. Students must complete 80-100 internship hours.</p>	3
HCI525	<p>ADVANCED ANALYTICS</p> <p>This course builds upon HCI505 by assisting students to advance their knowledge and skills regarding analytical methods. Using tableau, students will obtain a higher level of understanding in applying and manipulating advanced visual analytics while being introduced to machine learning with "R".</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • HCI505 : Foundational Data Analytics 	3
HCI582	<p>PROJECT MANAGEMENT II</p> <p>This course emphasizes the concepts/theories/practices in handling the fiscal and leadership responsibilities of project management related to informatics. By the end of this course, students will have developed their Informatics Immersion Project proposal. Students must complete 40 internship hours under the supervision of a mentor in the field of informatics.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • HCI504 : Project Management I 	
HCI583	<p>VIRTUAL ENGAGEMENT TO IMPROVE HEALTH</p> <p>This course introduces students to a virtual world where technology is driving change, impacting the way healthcare is delivered and managed through the use of the Internet, social media and mobile technologies. Students will engage in virtual activities that transform the traditional roles of interprofessional healthcare providers.</p>	3
HCI584	<p>TELEHEALTH I</p> <p>This is a foundational course that introduces students to telehealth services. Core concepts to be explored include telecommunications, technology infrastructure, and basic business requirements of implementing a telehealth service. Students will be introduced to designing telehealth encounters that promote health and wellness for both clinicians and consumers.</p>	3
HCI585	<p>TELEHEALTH II</p> <p>This course explores advanced telehealth services and concepts such as regulatory, compliance, legal, and accreditation needs. Students will be exposed to legislative and state parity laws, licensing, and payment reimbursement processes. An in-depth look at real-world critical telemedicine services and contracting needs will be presented.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • HCI584 : Telehealth I 	3
HCI586	<p>CYBERSECURITY</p> <p>Students will explore the cybersecurity needs within a health-</p>	3

Course Code	Course Information	Credits
	<p>related organization's IT infrastructure. Core concepts to be reviewed include cyber frameworks (exploitation, defense, threats etc.), cryptography, malware, and hacking. Students will gain a foundational awareness of the technical and managerial competencies needed to protect and secure database systems and information infrastructures.</p>	
HCI631	<p>INTEGRATING TECHNOLOGY INTO A HEALTHCARE ENVIRONMENT</p> <p>This course will introduce students to key factors to be considered when integrating new technology within a healthcare environment. Understanding how to successfully create change, define current process, design future processes and complete a gap analysis using the four stages of a systems life cycle to successfully integrate or change technology.</p>	3
HCI651	<p>DATABASE MANAGEMENT FOR EVIDENCE-BASED DECISION MAKING</p> <p>This course will assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>	3
HIS100	<p>INTRODUCTION TO WORLD HISTORY</p> <p>This course is an introduction to world history from the rise of civilization to the present. It establishes and compares major themes in the leading civilizations of today's world. It investigates the development of the modern world system and interpretations of its impact on these civilizations.</p>	3
HIS102	<p>INTRODUCTION TO AMERICAN HISTORY</p> <p>This course examines significant areas in the development of American society from the Colonial period to the present. It</p>	3

Course Code	Course Information	Credits
HIS200W	<p>focuses particularly on the issues of gender, class, race, religion, politics, and ideology to provide students with the grounding in those areas crucial to understanding today's society.</p> <p>REVOLUTIONS IN LATIN AMERICA</p> <p>This course surveys Latin American history from colonization through the present with an emphasis on world history themes. While the legacies of the colonial period will be briefly examined, the course will focus primarily on the nineteenth and twentieth centuries. Global themes will include the spread of European religions among indigenous populations; reverberation of liberal revolutionary ideas in the western hemisphere; the incorporation of Latin American and its populations into the world economy; the influence of race on society; and the spread of Marxism and resulting revolutions.</p>	3
HIS201	<p>This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.</p> <p>MODERN MIDDLE EAST</p>	3
HIS201W	<p>This course introduces students to the cultural, religious, social, economic and political landscape of the Middle East. It provides an in-depth look at 'traditional' society, state and culture and then highlights change and resistance to change in the period since the First World War, when European imperialism redrew the political map and westernization threatened to redraw social, cultural and religious maps.</p> <p>MODERN MIDDLE EAST</p>	3

Course Code	Course Information	Credits
HIS202W	<p>MODERN EUROPE</p> <p>The impact of World War I on Europe, the crisis of democracy and rise of totalitarian ideologies in the interwar period, and the decline of European influence in the world after World War II provide the focal points of the course. It then explores the slow resurgence of Europe, prospects for European unity, and revived European influence in international relations as a "third force."</p>	3
HIS204W	<p>EAST ASIAN STUDIES</p> <p>An exploration of East Asian geography, history, language, and culture from Zhou Dynasty (ca. 1,000 BCE) to present times. Focus on China, Korea, Japan with reference to neighboring regions and discussion of Taiwan. Emphasis on arts, ideologies, and East Asian cultural sites in Pittsburgh area.</p>	3
HIS205W	<p>AFRICA, PAST AND PRESENT</p> <p>This course is an interdisciplinary examination of the problems and promises of African development. It investigates the historical development of pre-independence society, culture, political institutions, and economic structures, and their interaction with post-independent economic problems and development strategies.</p>	3
HIS207	<p>ORAL HISTORY, NEIGHBORHOODS, & RACE</p> <p>Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.</p>	3

Course Code	Course Information	Credits
HIS213	SPECIAL TOPICS Special Topics	3
HIS215	IND & THE WORKING CLASS IN EUROPE & AMERICA This course seeks to understand who built America, under what conditions they labored, and to understand their hopes, dreams, and struggles to create a better future for themselves and their families. The course traces the historical development of the American working class from colonial times to the present. Particular attention is given to the formation of working class political and economic organizations and their impact on American history.	3
HIS216	RISE OF THE THIRD WORLD The emergence of Third-Worldism after 1945 is the central historical development of the twentieth century. The Afro-Asian movement namely aimed at recasting the historical initiative away from implacable colonialist powers. This course focuses on the analysis of doctrines and models that have collectively marked the rise of the Third World.	3
HIS220	U.S. WOMEN'S HISTORY This course explores women's historical experiences in the United States, from Native American women in the pre-colonial era to the present. It investigates the interaction of gender, race, ethnicity, class and sexuality and the ways that these relationships have shaped women's lives socially, economically, and politically.	3
HIS224	THE HOLOCAUST This course surveys the destruction of two-thirds of European Jewry during World War II. Through a close reading of primary texts and secondary sources, it explores the foundations and	3

Course Code	Course Information	Credits
	development of Nazi policy toward the Jews. The course documents the reactions of Jews, European peoples and governments, the U.S. people and government, and various churches and political movements.	
HIS228	RECENT AFRICAN HISTORY	3
	Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity bring overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.	
HIS230	HISTORY OF SOCIAL & POLITICAL THOUGHT	3
	History of Ideas surveys some fundamental normative questions that have been formulated in religion, politics, the Arts, and popular culture from Plato (5th century BC) to the present. It examines principles and methods of political and social thought as they relate to authority, obedience, freedom, equality, and justice.	
HIS231	HISTORY OF THE BRITISH EMPIRE	3
	History of the British Empire examines the historical narratives relating to imperialism, ethnocentrism, military aggressions, colonization, acculturation, repression of revolt, technological diffusion, intellectual outreach, and cross-cultural fertilization from the beginning of the reign of Queen Elizabeth I in 1558 to the return of Hong Kong to China in 1997.	
HIS234	ASIAN FOODWAYS	3
	A strategic survey of Japanese, Chinese/Taiwanese, Korean, and South Asian food ways in their originating contexts and the	

Course Code	Course Information	Credits
	U.S. Emphasis on anthropological understanding of food ways, cultural studies critique of class, gender, and family dynamics articulated via food, and historical transformations of food culture in response to migration and globalization.	
HIS241	<p>HISTORY OF ISLAM</p> <p>This course is a historical examination of classical Islamic civilization: its origins, nature, and development. Special attention is given to the religion of Islam and the contributions of Arabs, Persians, and Turks to Islamic civilization. Cross-listed as REL 241.</p>	3
HIS247	<p>AMERICAN ENVIRONMENTAL HISTORY</p> <p>Environmental history examines human interaction with their environment over time, a relationship shaped by cultures and political economies. In US history, there have been competing ideologies of capitalist exploitation, conservationism, preservationism, and sustainability. The course will also introduce students to different facets and methods of environmental history.</p>	3
HIS250	<p>HISTORY OF CHRISTIANITY</p> <p>This course provides students with a broad historical overview of Christianity, its origins, nature, and development. Students analyze primary sacred and historical texts in addition to historical scholarship on the religion.</p>	3
HIS257	<p>THE SIXTIES, VIETNAM & AMERICA</p> <p>This course examines the 1960s in America and Vietnam. The course focuses on the war in Vietnam from multiple perspectives including those of Vietnamese and American leaders and ordinary people, examining the roots of the conflict and how it shaped lives and the path of history.</p>	3

Course Code	Course Information	Credits
HIS263	<p>Pre-Requisites:</p> <p>Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> <li>• HIS100 : Introduction to World History <li>• HIS102 : Introduction to American History <li>• IND108 : Gender and Contemporary Social Issues <p>GENDER AND THE FAMILY IN AMERICA</p> <p>In every era of US history, family and gender have been subject to and shaped by other forces in society, such as religion, politics, and the economy. This course traces the history of social construction of family and gender from the antebellum period to the twentieth century. Attention will be paid to changing concepts of family roles, gender roles, and sexuality over time.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• HIS100 : Introduction to World History <li>• HIS102 : Introduction to American History 	3
HIS270	<p>U.S. AND THE HOLOCAUST</p> <p>This course examines the US and the Holocaust in Europe during the 1930s and 1940s. The primary focus is on developments in the US such as antisemitism, response to the rise of Hitler, knowledge of the Holocaust, and important decisions by national leaders.</p>	3
HIS283	<p>RELIGIOUS MOVEMENTS IN THE GLOBAL SOUTH</p> <p>This is an interdisciplinary exploration of religious experimentation and innovation in modern African history. The course focuses on enterprises that intensify the production and reinvention of sacred ceremonies, legendary narratives, social norms, ritualistic language, and forms of political participation.</p>	3
HIS285	AFRICAN-AMERICAN HISTORY	3

Course Code	Course Information	Credits
HIS301	<p>This course examines the history of African Americans within a global context from the 1500s through present. The course explores the role of West Africa in the Atlantic economy and slave trade; the nature of slavery in the US as compared to Latin America; emancipation in the US and Latin America; industrialization and migration; and the civil rights movement in its international context.</p> <p>This course examines the history of the modern Middle East and how U.S. foreign policy has shaped that history from 1945 to the present. It explores official U.S. policy toward the Middle East and the policies of Middle Eastern countries toward the United States, but also tries to understand U.S.-Middle East relations in cultural, economic, and social terms. Prerequisite(s): (s): Any 200-level history course or permission of the instructor.</p>	3
HIS307	<p>Through this course, students will learn about oral history and the racial dynamics of American cities, especially Pittsburgh, since World War II. Students will learn about the history of racial inequality in cities and the efforts of people to both combat and maintain that inequality. They will then conduct oral history interviews to further explore the role the lives of people in two neighborhoods in Pittsburgh.</p>	3
HIS309	<p>This course examines current methods and technologies used in the production of digital history, with a particular focus on incorporating local history resources into on-line historical media.</p> <p>Pre-Requisites: Complete the following course: • HIS102 : Introduction to American History</p>	3

Course Code	Course Information	Credits
HIS321	<p>THE SIXTIES, AMERICA & VIETNAM</p> <p>This course examines the 1960s in America and Vietnam. The course focuses on the war in Vietnam from multiple perspectives including those of Vietnamese and American leaders and ordinary people, examining the roots of the conflict and how it shaped lives and the path of history.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> <li>• HIS100 : Introduction to World History <li>• HIS102 : Introduction to American History <li>• IND108 : Gender and Contemporary Social Issues 	3
HIS326	<p>THE ARAB-ISRAELI CONFLICT</p> <p>This course examines the origins and issues of conflict between Arabs and Israelis over Palestine. Using primary and secondary sources, arguments of the conflict over several decades are considered, emphasizing the conflict between Palestinians and Israelis but also examining the role of regional and world powers.</p>	3
HIS328	<p>RECENT AFRICAN HISTORY AND NGO NETWORKS</p> <p>Western media typically paints a catastrophic view of Africa with stories of conflicts, environmental degradation, horrendous sanitary conditions, and their corollaries. Are the positive trends regarding economic growth, democratization, and endogenous creativity being overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.</p>	3
HIS342	<p>POST/MODERN CHINA: DIGITAL STORYTELLING</p> <p>An examination of Chinese cultural history from early 1900s to early 2000s, via literature and film, with training in digital storytelling techniques. Discussion of this dramatic national narrative framed by political and aesthetic considerations. Our</p>	3

Course Code	Course Information	Credits
	<p>interpretation and transmission of these narratives framed also by ethics and efficacy.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First - Year Communication Seminar 	
HIS351	<p>ASIAN PACIFIC ISLANDER AMERICA: HISTORY AND CULTURE</p> <p>Asian Pacific Islander American is a category well worth unpacking in cultural history contexts from the Western Pennsylvanian to the American and global, in order to grasp these communities' diversity and commonality, as well as struggles, resilience, and creative impact in social formations and in the arts.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	3
HIS352	<p>ASIAN PACIFIC ISLANDER AMERICA: FIELD EXPERIENCE</p> <p>This course facilitates direct interaction with and contribution to Asian Pacific American community organizations. Through their contributions to non-profit service programs, students gain deeper understanding of specific Asian Pacific American communities, their strengths, and their needs. Students also develop skill in addressing different audiences in a professional manner.</p>	1
HIS360	<p>HISTORY OF PAN-AFRICANISM</p> <p>History of Panafricanism examines the birth and development of the ideology that promoted a universal approach to the rehabilitation of the philosophical traditions, need for self-respect, political consciousness, and aspirations for transatlantic unity among Black people between the 1770s to the end of the 20TH century.</p>	3

Course Code	Course Information	Credits
HIS363	<p>GENDER AND THE FAMILY IN AMERICA</p> <p>In every era the family has served as a basic human institution, but it has always been subject to other forces in society, such as religion, politics, and the economy. This course traces the history of the American family from the antebellum period to the twentieth century. It examines changes in relationships within the family (parents/children, husbands/wives) and the changing role of the family in society. Particular attention will be paid to the role of the family in defining gender roles and the effects of other institutions upon the family.</p>	3
HIS490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• POL311 : Selected Topics in Social Science Research <li>• POL311W : Selected Topics in Social Science Research 	3
HIS493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• XXX123 : Permission of Instructor 	3

Course Code	Course Information	Credits
HIS498	TUTORIAL: HISTORY Tutorial: History	4
HIS499	TUTORIAL: HISTORY Tutorial: History	4
HIST349	THE HISTORY AND CULTURE OF FOOD IN ITALY The History and Culture of Food in Italy	3
HON100	INTRODUCTION TO THE HONORS PROGRAM This course is required for all first-year Honors students. Topics covered include the requirements of the Honors Program, soft skills development, the pillars of the Honors Program (Leadership, Research, and Engagement), and professional development.	1
HON200	INTRODUCTION TO RESEARCH METHODS This course introduces students to all phases of research as conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.	3
HON413	SPECIAL TOPICS IN HONORS - LEADERSHIP SURVEY Special Topics in Honors - Leadership Survey	3
HSC100	INTRODUCTION TO THE HEALTH PROFESSIONS Introduction to the Health Professions explores a variety of health professions along with the roles and responsibilities of a	1

Course Code	Course Information	Credits
	health care professional. Students will interact with health care professionals and do self-exploration of their own career interests. They will be introduced to aspects of being a health care professional including integrity, leadership, ethics, cultural competency, and communication.	
HSC201	<p>HEALTH LITERACY: A PRIMER FOR HEALTH CARE PROFESSIONALS</p> <p>This one credit course focuses on the concept of health literacy. Students will be provided an opportunity to explore the influence of health literacy on health care decisions. Both challenges and opportunities for health care professionals will be analyzed. Strategies for promoting informed consumers of health-related information will be introduced.</p>	1
HSC205	<p>EMOTIONAL COMPETENCE</p> <p>Students will be provided an opportunity to explore emotionally competent behaviors that are vital to therapeutic interactions within the health care environment. Both challenges and opportunities for health care professionals will be assessed.</p>	1
HSC210	<p>INTRODUCTION TO CLIMATE CHANGE AND HEALTH</p> <p>This one-credit course provides a basic understanding of climate change and its influence on human health in the 21st century.</p>	1
HSC633I	<p>GLOBAL HEALTH PERSPECTIVES PART ONE</p> <p>This course is intended to provide an opportunity for occupational therapy students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of</p>	1

Course Code	Course Information	Credits
HSC633II	<p>GLOBAL HEALTH PERSPECTIVES PART TWO</p> <p>This course is intended to provide an opportunity for occupational therapy students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of the visiting country 2) illustrate the role or potential role of occupational therapy in contributing to the health and wellbeing of the population and 3) reflect on their personal growth and on the sustainability of their service.</p>	1
HSC634I	<p>GLOBAL HEALTH I</p> <p>This course provides opportunity for students to study and experience global health issues through international experience. Students have the opportunity to understand culture and healthcare abroad, analyze the role of health professionals in contributing to the health and wellbeing of the population, and personally reflect on the impact of the experience.</p>	1
HSC634II	<p>GLOBAL HEALTH II</p> <p>This course provides the opportunity for students to study and experience global health issues through international experience. Students have the opportunity to understand culture and healthcare abroad, analyze the role of health professionals in contributing to the health and wellbeing of the population, and personally reflect on the impact of the experience.</p>	1

Course Code	Course Information	Credits
IAR105	ENVIRONMENT AND BEHAVIOR Intended for interior architecture majors or potential majors, this course introduces students to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.	3
IAR202	THEORY OF INTERIOR ARCHITECTURE STUDIO This course is intended only for majors or potential majors and cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises and projects.	3
IAR202	THEORY OF INTERIOR ARCHITECTURE This course is intended only for majors or potential majors and cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises and projects.	3
IAR210	2D VISUAL COMMUNICATION This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. Students will develop an understanding of design thinking and visualization and the skills needed to generate design drawings communicating interior environments. One-point, two-point, isometric, and axonometric drawing methods will be covered.	3

Course Code	Course Information	Credits
IAR211	<p>DESIGN FUNDAMENTALS I</p> <p>This course covers 2D and 3D foundational principles necessary to understand form to space relationships, organizational typologies and multi-view drawing. Graphic literacy as a language and philosophy for analysis, expression, and presentation of interior architecture is introduced and an understanding of design visualization is developed. Additional fee(s): applied art fee.</p>	3
IAR213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
IAR214	<p>DIGITAL VISUALIZATION I</p> <p>This course explores design principles related to color theory, typography, branding, web design, print design and layout relative to portfolio design, interior design presentation, communication and development. This course also explores basic human centered design and product design principles as a basis for portfolio and visual design. This course is designed to aid and mentor students in assembling a design portfolio for their academic and professional work. Students will learn graphic design techniques for both print and web including basic tools in Adobe Creative Suite.</p>	3
IAR215	<p>DIGITAL VISUALIZATION II</p> <p>Students learn the basic computer drafting and drawing skills associated with AutoCAD software. Projects include creating work from scratch and working from existing files. An understanding of drawing layers, detailing, layout, and printing will be presented. Adobe Creative Suite and other rendering software are covered. Additional Fee: Course Computing Fee.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • IAR219 : Drawing and Model Making 	
IAR217	<p>INTERIOR ARCHITECTURE I</p> <p>This studio introduces students to holistic design analysis, space planning, understanding user experience, and design drawing by examining small to medium scale residential projects. Emphasis is placed on human factors, space planning, spatial understanding, scale, design iteration, materials, furniture, and color with respect to user needs.</p>	3
IAR218	<p>BUILDING CODES</p> <p>Students learn and apply relevant building codes as they relate to the health and life safety of the occupant. This course addresses energy laws, the principles of universal design and accessible code compliance.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IAR220 : Interior Architecture II <p>Complete the following course:</p> <ul style="list-style-type: none"> • IAR225 : Interior Architecture Studio III 	3
IAR219	<p>DESIGN FUNDAMENTALS II</p> <p>An introduction to interior planning which covers general principles of interior space and its components while working through phases of design from ideation and the basics of space planning to the development and completion of design. Students explore the design process through a series of residential and non-residential exercises.</p>	3
IAR220	<p>INTERIOR ARCHITECTURE II</p> <p>This studio addresses problem identification and problem solving in the context of small to medium scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, materials, furniture, fixtures,</p>	3

Course Code	Course Information	Credits
IAR225	INTERIOR ARCHITECTURE II	3
	<p>equipment, and color with respect to user needs.</p> <p>This studio addresses problem identification and problem solving in the context of small scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs. Additional Fee: Course Computing fee.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IAR215 : Digital Visualization II • IAR220 : Interior Architecture II 	
IAR225	INTERIOR ARCHITECTURE III	3
	<p>This studio addresses problem identification and problem solving in the context of small scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs. Additional Fee: Course Computing fee.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IAR217 : Interior Architecture I 	
IAR230	INTERIOR MATERIALS	3
	<p>This course is intended only for interior architecture majors or potential majors and addresses architectural materials and finishes. Students learn to select, specify and apply architectural finishes. They create specifications, execute take-offs, and produce cost estimates for interior construction. Manufacturing processes, installation methods, maintenance requirements, code regulations, and testing standards are covered.</p>	

Course Code	Course Information	Credits
IAR231	<p>GREEN & SUSTAINABLE DESIGN</p> <p>Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the Environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.</p>	3
IAR232	<p>COLOR AND TEXTILES STUDIO I</p> <p>The first part of this residential studio examines theories of color in relation to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.</p>	3
IAR257	<p>20TH- AND 21ST-CENTURY ARCHITECTURE</p> <p>This course is designed to relate the impact of architecture on both public and private spaces throughout the twentieth century and provide a view towards the future of architecture in the twenty-first century. The course will guide you through the major styles of architecture of the twentieth century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings and the arts and artists of the day.</p>	3
IAR257W	<p>20TH- AND 21ST- CENTURY ARCHITECTURE</p> <p>This course is designed to relate the impact of architecture on both public and private spaces throughout the twentieth century and provide a view towards the future of architecture in the twenty-first century. The course will guide you through the major styles of architecture of the twentieth century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior</p>	3

Course Code	Course Information	Credits
	spaces, furnishings and the arts and artists of the day.	
IAR259	HISTORY OF INTERIOR ARCHITECTURE: PRE-20TH CENTURY <p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>	3
IAR259W	HISTORY OF INTERIOR ARCHITECTURE: PRE-20TH CENTURY <p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>	3
IAR260	FALLINGWATER STUDIO RESIDENCY <p>As a studio residency at Frank Lloyd Wright's Fallingwater, students develop and apply design thinking and visualization through the exploration and application of sustainable strategies, architectural theories, manifestos, and phenomenology. Student outcomes are the culmination of observations, hikes, lectures, reading, discussions, critiques and design charrettes resulting in a final presentation.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • IAR219 : Drawing and Model Making 	3
IAR261W	HISTORY OF INTERIOR ARCHITECTURE: PRE-20TH CENTURY <p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment</p>	3

Course Code	Course Information	Credits
	of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.	
IAR262W	<p>20TH AND 21ST CENTURY ARCHITECTURE</p> <p>This course is designed to relate the impact of architecture on both public and private spaces throughout the twentieth century and provide a view towards the future of architecture in the twenty-first century. The course will guide you through the major styles of architecture of the twentieth century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings and the arts and artists of the day.</p>	3
IAR310	<p>DIGITAL VISUALIZATION III</p> <p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for use in all phases of the design process. Students are introduced to Revit and Sketch-up. Graphic rendering skills are also developed to help students communicate interior spaces Additional Fee: Course Computing fee.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• IAR210 : 2D Visual Communication <li>• IAR215 : Digital Visualization II 	3
IAR315	<p>CONSTRUCTION DOCUMENTS</p> <p>Construction techniques are studied through the production of a set of construction documents. Issues addressed include the selection and assembly of materials, construction methods, detailing of interior finish systems and cabinetry, building codes, and accessibility. Additional Fee(s): Course Computing fee.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • IAR225 : Interior Architecture III • IAR310 : Digital Visualization III 	
IAR316	PORTFOLIO This course will allow Interior Architecture students to solidify their professional portfolio for prospective internships and employment. Students will produce a physical and digital portfolio. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • IAR214 : Digital Visualization I 	3
IAR320	INTERIOR ARCHITECTURE III This advanced studio addresses concept development, design development, and detailing of medium- and large-scale projects. Emphasis is placed on program analysis, user needs, space planning, three-dimensional spatial development, design language and composition, materials and assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety. Pre-Requisites: Complete all 3 of the following courses: <ul style="list-style-type: none"> • IAR218 : Building Codes • IAR225 : Interior Architecture Studio III • IAR335 : Lighting & Acoustics 	3
IAR321	INTERIOR ARCHITECTURE IV This advanced studio addresses concept development, design development, and detailing of medium- and large-scale projects. Emphasis is placed on program analysis, universal design, user needs, space planning, three-dimensional spatial development, design language and composition, materials and assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety.	3

Course Code	Course Information	Credits
IAR325	<p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• IAR225 : Interior Architecture II <li>• IAR225 : Interior Architecture Studio III <p>INTERIOR ARCHITECTURE IV</p> <p>This advanced studio addresses concept development, design development, and detailing of medium- and large-scale projects. Emphasis is placed on program analysis, user needs, space planning, three-dimensional spatial development, design language and composition, materials and assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety. Additional fee(s): Course Computing fee.</p> <p>Pre-Requisites:</p> <p>Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> <li>• IAR310 : Digital Visualization III <li>• IAR315 : Construction Documents <li>• IAR320 : Interior Architecture Studio IV <li>• IAR330 : Construction Systems & Methods 	3
IAR326	<p>INTERIOR ARCHITECTURE V</p> <p>This 6-credit advanced studio addresses concept development, design development, and detailing of medium-to-large scale projects. Emphasis is placed on program analysis, user needs, space planning, three-dimensional spatial development, design language and composition, materials, assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety.</p>	6
IAR330	<p>CONSTRUCTION SYSTEMS & METHODS</p> <p>This course provides an overview of architecture building systems including exterior and interior construction methods and terminology. This course provides an overview of environmental control systems, including HVAC, plumbing, fire protection, power distribution, security, and data/voice telecommunication. Emphasis is placed on energy</p>	3

Course Code	Course Information	Credits
	consumption, conservation, human comfort, and health and safety.	
IAR335	<p>LIGHTING & ACOUSTICS</p> <p>This course is an introduction to lighting and acoustics. Emphasis is placed on the psychology of lighting, visual comfort criteria, measurement and calculations, available technologies in lighting design, the selection of fixtures, and the application of computer-aided lighting simulation tools. Principles of acoustics, acoustic properties of materials and building systems in relation to building structures, sound transmission between rooms, and design methods in room and building acoustics are also addressed. Additional Fee(s): Course Computing fee.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• IAR230 : Interior Materials 	3
IAR441	<p>ENVIRONMENTAL/SUSTAINABLE COMMUNITY SERVICE</p> <p>Encouraging environmental stewardship, students are required to participate in an environmental community service project under the supervision of a field leader or faculty member.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• IAR215 : Digital Visualization II 	1
IAR443	<p>COMMUNITY SERVICE</p> <p>Encouraging engagement with the surrounding community, students are required to participate in a community service project under the supervision of a field leader or faculty member.</p>	1
IAR445	<p>PROFESSIONAL PRACTICE</p> <p>In this course, students are introduced to the specialized</p>	3

Course Code	Course Information	Credits
	<p>services provided by the professional interior designer. Emphasis is placed on office operations and personnel issues, marketing strategies, project management, contract documents, ethics, and the legal and financial aspects of professional practice.</p>	
IAR470	<p>IMMERSIVE RESEARCH DESIGN</p> <p>This writing based course introduces research methods and tools as the foundations of evidence based design. This course is a review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods of gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools, culminating in the development of a research paper.</p>	3
IAR490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3
IAR491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p>	1
IAR492	<p>INDEPENDENT STUDY</p>	2

Course Code	Course Information	Credits
	Independent Study	
IAR493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IAR498	<p>TUTORIAL I: INTERIOR ARCHITECTURE</p> <p>This course is the first part of a year long tutorial that stresses evidence-based design. Students create a program for a project selected by the instructor using the latest research and literature available. The program serves as the foundation for design decision-making in IAR 499. Prerequisite(s): IAR 325</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • IAR325 : Interior Architecture IV 	4
IAR499	<p>TUTORIAL II: INTERIOR ARCHITECTURE</p> <p>This course is the second part of a year long tutorial that stresses evidence-based design. Using the program developed in IAR 420 as a foundation, students investigate a problem from concept generation through design development and detailing. Prerequisite(s): IAR 498 Additional Fee(s): Course Computing fee.</p>	4
IAR502	<p>THEORY OF INTERIOR ARCHITECTURE</p> <p>This course cultivates the ability to use formal architectural ordering to develop creative abstract designs that translate into three-dimensional compositions of space and form. Architectural theories and manifestos are explored through process tools and applied utilizing design exercises including concept development, abstract ideation, physical embodiment, architectural composition and analytical review.</p>	3

Course Code	Course Information	Credits
IAR505	DESIGN AND BEHAVIOR	3
	<p>The designed environment influences and is influenced by human activity patterns and behavior. This course is an introduction to significant theories concerning the interaction of people and interior architecture. Emphasis is placed on shared human needs and differences based on age, culture, gender, and occupation.</p>	
IAR510	DRAFTING & GRAPHICS STUDIO	3
	<p>This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. Students are introduced to a number of techniques and methods of drawing used by interior designers, including freehand drawing, use of colored pencils, markers, and mechanical drafting through various exercises. An understanding is developed of architectural scale, plans, elevations, and sections. Additional work is spent on values, colors, palettes, and shadowing techniques that culminate in a final project.</p>	
IAR510	2D VISUAL COMMUNICATIONS	3
	<p>Intended for interior architecture majors or potential majors, this course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding of design thinking and visualization is developed. One-point, two-point, isometric, and axonometric drawing methods will be covered. Additional fee(s): applied art fee.</p>	
IAR514	DIGITAL VISUALIZATION I	3
	<p>This course explores design principles related to color theory, typography, branding, web design, print design and layout relative to portfolio design, interior design presentation,</p>	

Course Code	Course Information	Credits
	<p>communication and development. This course also explores basic human centered design and product design principles as a basis for portfolio and visual design. This course is designed to aid and mentor students in assembling a design portfolio of their academic and professional work. Students will learn graphic design techniques for both print and web, including basic tools in the Adobe Creative Suite.</p>	
IAR515	<p>DIGITAL DRAWING</p> <p>Students learn the basic computer drafting and drawing skills associated with AutoCAD software. Projects include creating new work from scratch and working from existing files. An understanding of drawing layers, detailing, layout, and printing will be presented. Pre-requisites: IAR 510 or permission from the instructor. Additional fee: Course Computing Fee</p>	3
IAR515	<p>DIGITAL VISUALIZATION II</p> <p>Students learn the basic computer drafting and drawing skills associated with AutoCAD software. Projects include creating new work and working from existing files. An understanding of drawing layers, detailing, layout, and printing will be presented. Adobe Creative Suite and other rendering software are covered. Additional Fee: Course Computing fee.</p> <p>Pre-Requisites: Complete the following course: • IAR510 : Drafting Studio Complete the following course: • IAR510 : 2D Visual Communications</p>	3
IAR518	<p>BUILDING CODES</p> <p>Students learn and apply relevant building codes as they relate to the health, safety, and life safety of the occupant. This course addresses energy laws, the principles of Universal design, and accessible code compliance. Pre-requisites: IAR520, IAR535</p>	3

Course Code	Course Information	Credits
IAR519	<p>DRAWING AND MODEL MAKING</p> <p>Students will develop the skills needed to generate design drawings using markers and colored pencils which communicate interior environments. One-point, Two-point, isometric, and axonometric drawing methods will be covered. Students will explore three-dimensional model making techniques. Pre-requisite: IAR510</p>	3
IAR519	<p>DRAFTING AND MODEL MAKING</p> <p>Intended for interior architecture majors or potential majors. This course develops graphic literacy as a language and philosophy for observation, analysis, expression, and presentation of interior architecture. An understanding is developed of architectural scale, plans, elevations, and sections. Students will explore three-dimensional model making techniques.</p>	3
IAR520	<p>INTERIOR ARCHITECTURE I</p> <p>This studio addresses problem identification and problem solving in the context of small-scale projects of modest scope. Emphasis is placed on human factors, space planning, spatial experience, scale, basic elements of 2-D design, concept development, space planning, scale, textiles, and color with respect to user needs.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • IAR510 : Drafting Studio • IAR519 : Drawing and Model Making • IAR532 : Color and Textiles 	3
IAR520	<p>ARCHITECTURE STUDIO II</p> <p>This studio addresses problem identification and problem solving in the context of medium to large-scale projects of modest scope. Emphasis is placed on human factors, space</p>	3

Course Code	Course Information	Credits
	<p>planning, spatial experience, scale, basic elements of 2-D and 3-D design, concept development, space planning, scale, textiles, and color with respect to user needs.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • IAR510 : Drafting Studio • IAR510 : 2D Visual Communications <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • IAR519 : Drafting and Model Making • IAR519 : Drawing and Model Making <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • IAR532 : Color and Textiles Studio I • IAR532 : Color and Textiles 	
IAR525	<p>INTERIOR ARCHITECTURE II</p> <p>This studio addresses problem identification and problem solving in the context of small scale projects of modest scope. Emphasis is placed on programming human factors, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs. Additional Fee: Course Computing Fee</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • IAR502 : Theory of Interior Architecture • IAR515 : Digital Drawing • IAR520 : Interior Architecture I 	3
IAR525	<p>INTERIOR ARCHITECTURE STUDIO III</p> <p>The studio addresses problem identification and solutions in the context of medium to-large scale projects of complex scope. Emphasis is placed on programming human factors, universal design principles, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • IAR502 : Theory of Interior Architecture • IAR515 : Digital Visualization II • IAR520 : Architecture Studio II • IAR535 : Construction Methods 	
IAR530	<p>INTERIOR MATERIALS</p> <p>This course is intended for majors or potential majors and addresses architectural materials and finishes. Students learn to select, specify, and apply architectural finishes. They create specifications, execute take-offs, and produce cost estimates for interior construction. Manufacturing processes, installation methods, maintenance requirements, code regulations, and testing standards are covered.</p>	3
IAR532	<p>COLOR AND TEXTILES</p> <p>The first part of this course examines theories of color in relations to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.</p>	3
IAR532	<p>COLOR AND TEXTILES STUDIO I</p> <p>The first part of this residential studio examines theories in color in relation to light and space. In the second part, key topics include the selection, specification and application of textiles based on their properties and performance criteria, sustainability, installation methods, maintenance requirements, and regulations and standards.</p>	3
IAR535	<p>CONSTRUCTION METHODS</p> <p>Intended for interior architecture majors, this course provides an overview of architectural building systems, including exterior and interior construction methods and terminology.</p>	3

Course Code	Course Information	Credits
IAR557	20TH & 21ST CENTURY ARCHITECTURE	3
	<p>This course is designed to relate the impact of architecture on both public and private spaces throughout the 20th century and provide a view towards the future of architecture in 21st century. The course will guide you through the major styles of architecture of the 20th century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings, and the arts and artists of the day.</p>	
IAR559	HISTORY OF INTERIOR ARCHITECTURE	3
	<p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>	
IAR561	HISTORY OF INTERIOR ARCHITECTURE	3
	<p>This survey course examines world architecture from prehistoric times through the 19th century, including the built environment of Europe, the Middle East, Asia, and the Americas. Emphasis is placed on the role of interior spaces, furnishings, and art within architecture.</p>	
IAR562	20TH & 21ST CENTURY ARCHITECTURE	3
	<p>This course is designed to relate the impact of architecture on both public and private spaces throughout the 20th century and provide a view towards the future of architecture in 21st century. The course will guide you through the major styles of architecture of the 20th century and investigate the socio-historic context of the works and determinants of that architecture. Emphasis will also be placed on the interior spaces, furnishings, and the arts and artists of the day.</p>	

Course Code	Course Information	Credits
IAR610	<p>ADVANCED COMPUTER APPLICATIONS</p> <p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for us in all phases of the design process. Students are instructed to Revit and Sketch-up. Graphic skills are also developed to help students communicate interior design schemes. Additional fees: Course Computing Fee</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IAR515 : Digital Drawing 	3
IAR610	<p>DIGITAL VISUALIZATION III</p> <p>This advanced course focuses on Building Information Modeling (BIM) that integrates and synchronizes three-dimensional building modeling for us in all phases of the design process. Students are instructed to Revit and Sketch-up. Graphic skills are also developed to help students communicate interior design schemes. Additional fees: Course Computing Fee</p>	3
IAR615	<p>CONSTRUCTION DOCUMENTS STUDIO</p> <p>Construction techniques are studied through the production of a set of construction documents. Issues addressed include the selection and assembly of materials, construction methods, detailing of interior finish systems and cabinetry, building codes, and accessibility. Additional Fees: Course Computing Fees</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IAR525 : Interior Architecture Studio III • IAR610 : Digital Visualization III <p>Co-Requisites:</p> <ul style="list-style-type: none"> • IAR620 : Interior Architecture III 	3
IAR616	<p>VISUAL COMMUNICATION STUDIO</p> <p>This course explores color theories, typology, branding, graphic</p>	3

Course Code	Course Information	Credits
	<p>organization and compositional layout relative to interior design presentation, communication, and development. Pre-requisite: IAR515, 519, 610. Additional fees: Course Computing Fee</p> <p>Pre-Requisites: Complete the following course: • IAR620 : Interior Architecture III Complete the following course: • IAR620 : Interior Architecture Studio IV</p>	
IAR616	<p>PORTFOLIO</p> <p>This course will allow Interior Architecture students to solidify their professional portfolio for prospective internships and employment. Students will produce a physical and digital portfolio. Additional fees: Course Computing Fee.</p>	3
IAR620	<p>INTERIOR ARCHITECTURE III</p> <p>This advanced studio addresses concept development, design development, and detailing of medium- and large-scale projects. Emphasis is placed on program analysis, user needs, space planning, three-dimensional spatial development, design language and composition, materials and assemblies, color, lighting, acoustics, environmental systems, and building codes and life safety. Additional Fees: Course Computing Fee</p> <p>Pre-Requisites: Complete all 4 of the following courses: • IAR518 : Building Codes • IAR525 : Interior Architecture Studio III • IAR610 : Digital Visualization III • IAR635 : Lighting and Acoustics Studio</p>	3
IAR620	<p>INTERIOR ARCHITECTURE STUDIO IV</p> <p>This advanced studio addresses concept development, design development, and detailing of medium-to-large scale projects. Emphasis is placed on program analysis, user needs, universal design, space planning, three-dimensional spatial development,</p>	3

Course Code	Course Information	Credits
IAR630	<p>design language, composition, materials and assemblies, color, lighting, acoustics, environmental systems, building codes, and life safety. Additional Fees: Course Computing Fee.</p> <p>CONSTRUCTION SYSTEMS AND METHODS</p> <p>This course provides an overview of architectural building systems, including exterior and interior construction methods and terminology as well as environmental control systems, including HVAC, plumbing, fire protection, power distribution, security, building codes, and data/voice telecommunication. Emphasis is placed on energy consumption and conservation, human comfort, and health and safety.</p>	3
IAR631	<p>DESIGN FOR SUSTAINABILITY</p> <p>Students will broaden their understanding of the philosophies, principles, perspectives, values, and foundations of sustainability, exploring the environmental, cultural, social, economic, and political aspects in order to build a context in which sustainability can be effectively applied to a wide variety of built environment design projects at various scales.</p>	3
IAR635	<p>LIGHTING AND ACOUSTICS STUDIO</p> <p>This course is an introduction to lighting and acoustics. Emphasis is placed on the psychology of lighting, visual comfort criteria, measurement and calculations, available technologies in lighting design, the selection of fixtures, and the application of computer aided lighting simulation tools. Principles of acoustics, acoustic properties of materials and building systems in relation to building structures, sound transmission between rooms, and design methods in room and building acoustics are also addressed. Pre- requisites: IAR 525, 515. Additional Fees: Course Computing Fee</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • IAR502 : Theory of Interior Architecture • IAR515 : Digital Drawing • IAR520 : Interior Architecture I 	
IAR640	<p>INTERNSHIP</p> <p>An internship experience provides students with a greater understanding of professional practice. With instructor approval, students work full-time in an office environment under the supervision of a practitioner. Pre-Requisite: IAR620. Co-Requisite: IAR645</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IAR525 : Interior Architecture II 	6
IAR641	<p>INTERNSHIP</p> <p>An internship experience provides students with a greater understanding of professional practice. With instructor approval, students work full-time in an office environment under the supervision of a practitioner.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IAR642	<p>INTERNSHIP</p> <p>Internship</p>	2
IAR643	<p>INTERNSHIP</p> <p>Internship</p>	1
IAR645	<p>PROFESSIONAL PRACTICE</p> <p>In this course, students are introduced to the specialized services provided by the professional interior designer. Emphasis is placed on office operations and personnel issues,</p>	3

Course Code	Course Information	Credits
	marketing strategies, project management, contract documents, ethics, and the legal and financial aspects of professional practice.	
IAR650	<p>INTERIOR ARCHITECTURE V: CAPSTONE STUDIO</p> <p>This course stresses evidence-based design. Students create a program for a project influenced by their research in IAR655. The program and research findings serve as a foundation for the investigation of a design detailing. Additional fees: Course Computing Fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • IAR615 : Construction Documents Studio • IAR615 : Construction Documents 	3
IAR654	<p>GRADUATE RESEARCH SEMINAR</p> <p>This graduate seminar is an introduction to the review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods for gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools.</p>	3
IAR655	<p>IMMERSIVE DESIGN RESEARCH</p> <p>This graduate seminar is a review and analysis of published research in the disciplines of interior design and architecture. Students are introduced to various methods for gathering information and conducting research with emphasis placed on the selection and utilization of data collection strategies and tools, culminating in the development of a research proposal.</p>	3
IAR661	<p>INTERIOR ARCHITECTURE INQUIRY</p> <p>This course will introduce students to architectural theory through specific readings that will enable them to establish</p>	3

Course Code	Course Information	Credits
	<p>basic critical reasoning skills utilizing theoretical works. the course will focus on reading and discussing seminal texts while understanding their historical importance to architecture and interior design.</p>	
IAR662	<p>ISSUES IN INTERIOR ARCHITECTURE</p> <p>Students are introduced to current writings and discussion related to sustainability and globalization, which are then analyzed for their relevance to the decisions made by interior architects. An awareness of current issues and how the student may impact them provides a framework as students engage in research for their thesis.</p>	3
IAR665	<p>SPECIAL TOPICS IN INTERIOR ARCHITECTURE</p> <p>Theory, research, and application are stressed in relation to interior architecture through various course topics. Special topics may include design and culture, design for special populations, design for specific building types, programming, post occupancy evaluation, and historic preservation.</p>	3
IAR670	<p>SUPERVISED TEACHING</p> <p>Students have the opportunity to assist with a class in interior architecture under the supervision of a faculty member.</p>	3
IAR670	<p>SUPERVISED TEACHING</p> <p>Supervised Teaching</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IAR675	<p>INDEPENDENT STUDY</p> <p>In-depth investigation conducted independently by the student</p>	3

Course Code	Course Information	Credits
	<p>under the supervision of an instructor. This course may be taken to satisfy an elective requirement.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
IAR680	<p>THESIS DEVELOPMENT</p> <p>The thesis is independently taken by a student under the guidance of a thesis committee. The final project is a written thesis with original research or a creative design project that is supported by in-depth information gathering and written material.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • ENG528 : Academic Writing • IAR655 : Immersive Design Research • IAR661 : Interior Architecture Inquiry • IAR662 : Issues in Interior Architecture 	3
IAR681	<p>THESIS</p> <p>The thesis is independently taken by a student under the guidance of a thesis committee. The final project is a written thesis with original research or a creative design project that is supported by in-depth information gathering and written material.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IAR680 : Thesis Development 	3
IAR691	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1

Course Code	Course Information	Credits
IAR692	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
IAR693	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IAR800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
IHS360	<p>WOMEN'S INTEGRATIVE HEALTH</p> <p>This course addresses women's health issues from a holistic perspective including diet, exercise, stress management, dietary supplements, body therapies and alternative medical systems as well as conventional medicine.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • IHS150 : Introduction to Integrative Health Studies • IHS200W : Integrative Nutrition • IHS210 : Dietary Supplements and Botanical Medicine • IHS220 : Acupuncture and Traditional Chinese Medicine 	3
IHS492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2

Course Code	Course Information	Credits
IHS493	<p>INDEPENDENT STUDY</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IHS498	<p>TUTORIAL</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	4
IHS499	TUTORIAL	4
IMM103	<p>INTRODUCTION TO IMMERSIVE MEDIA</p> <p>Students receive an introduction to 3d modeling, programming, architectural and design theory, and start learning the skills and technology necessary to build immersive experiences.</p>	3
IMM202	<p>INTRODUCTION TO GAME DESIGN</p> <p>Students learn software and skills to develop interactive experiences using game design, game engine software, design processes and a variety of technology. Projects will focus on using immersive, interactive, and game technologies to develop a range of experiences.</p>	3
IMM215	<p>PROGRAMMING FOR IMMERSIVE EXPERIENCES</p> <p>This course provides an introduction to programming for immersive experiences using real-time software and programming languages. Students will learn interaction scripting, game engine class structures, planning and documenting a significant programming project, learn to work on a programming project in teams, and learn to use industry standard development tools.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	<p>Complete the following course:</p> <ul style="list-style-type: none"> • IMM103 : Immersive Media I 	
IMM220	<p>STUDIO I - 3D INTERFACES & USER EXPERIENCE</p> <p>Students learn 3D modeling techniques for environment design, interface and user experience design, and prop design. Using both traditional desktop 3D modeling software and immersive 3D modeling software students will create a variety of 3D models and interfaces for use in immersive experiences.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IMM202 : Immersive Media II • IMM215 : Programming for Immersive Experiences 	3
IMM240	<p>IMMERSIVE DESIGN SEMINAR</p> <p>The Immersive Design Seminar explores the influence of other design fields and design practices on immersive design while examining current cultural, ethical, and social issues affecting immersive work.</p>	3
IMM250	<p>HUMAN CENTERED DESIGN</p> <p>Students will learn the principles of human centered design in order to develop empathy for the people they design for. They will use HCD methods to generate ideas; build prototypes; share their designs; and create a project informed by their designs.</p>	3
IMM310	<p>STUDIO II - ARCHITECTURE AND ENVIRONMENTS</p> <p>Students apply knowledge gained from introductory Immersive Media and design courses to create immersive environments informed by architectural theory. This course will leverage a variety of 3D, immersive, and game engine software.</p> <p>Pre-Requisites: Complete the following course:</p>	6

Course Code	Course Information	Credits
IMM370	<p>• IMM220 : Studio I - 3D Interfaces & User Experience</p> <p>STUDIO III - SIMULATION AND TRAINING</p> <p>Students will examine the uses of immersive media in the fields of simulation and training. They will learn simulation and training experience theory through an analysis of existing experiences and through a series of practical group projects developing experiences for these fields.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• IMM220 : Studio I - 3D Interfaces & User Experience <li>• IMM310 : Studio II - Architecture and Environments 	6
IMM371	<p>STUDIO III: SERIOUS PLAY</p> <p>Students will examine the uses of immersive media in the fields of education and training, utilizing game design methods and research. They will learn game design, advanced experience design, and instructional design through analysis of existing experiences and a series of practical group projects developing immersive experiences.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• IMM220 : Studio I - 3D Interfaces & User Experience 	3
IMM405	<p>STUDIO IV - PROTOTYPING FOR ADVANCED SYSTEMS</p> <p>Students will be given the opportunity to develop immersive experiences for high-end, experimental, and prototype equipment that is only available to students in this course and later studios. Students will learn how to work with complex immersive equipment systems and early access software in a collaborative studio environment.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• IMM220 : Studio I - 3D Interfaces & User Experience 	6

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • IMM310 : Studio II - Architecture and Environments 	
IMM406	<p>STUDIO IV: PROTOTYPING FOR ADVANCED SYSTEMS</p> <p>Students will be given the opportunity to develop immersive experiences for high-end, experimental, and prototype equipment that is only available to students in this course and later studios. Students will learn how to work with complex immersive equipment systems and early access software in a collaborative studio environment.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IMM220 : Studio I - 3D Interfaces & User Experience 	3
IMM455W	<p>STUDIO V - ETHICS AND ACCESS</p> <p>This studio course explores the ethical and accessibility issues surrounding immersive technologies through the design and development of immersive experiences that seeks to address these issues.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • IMM220 : Studio I - 3D Interfaces & User Experience • IMM310 : Studio II - Architecture and Environments 	6
IMM470W	<p>IMMERSIVE DESIGN RESEARCH</p> <p>This course gives students an opportunity to conduct research using human centered design methods and research methods to craft a plan for their final semester Studio VI course.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IMM220 : Studio I - 3D Interfaces & User Experience • IMM250 : Human Centered Design 	3
IMM490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the</p>	3

Course Code	Course Information	Credits
	<p>senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theatre production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • IMM220 : Studio I - 3D Interfaces & User Experience • IMM470W : Immersive Design Research 	
INCOM304	<p>INTERNSHIP - COMMUNICATION</p> <p>Internship - Communication</p>	4
IND101	<p>FOUNDATIONS OF LEARNING: THEORY & APPLICATION</p> <p>In this course, students will learn the science behind how our brains learn, the significance of a growth-mindset, and how to become creators of their own success through active learning. Additionally, students will learn practical and engaging strategies for note-taking, active reading, time management, test-taking, and other study strategies.</p>	1
IND104	<p>LSAT PREPARATION</p> <p>This course will help students prepare for the LSAT, by focusing on study skills particular to this examination.</p>	1
IND106	<p>DIALOGUES SEMINAR</p>	1

Course Code	Course Information	Credits
IND108	GENDER AND CONTEMPORARY SOCIAL ISSUES	3
IND113	<p>SPECIAL TOPICS</p> <p>A foundation of knowledge for traveling to Costa Rica for CSA341: Chatham Abroad: Central America: Costa Rica-Special Topics in Sustainability. The history of Costa Rica is explored, emphasizing the nation's push for more sustainable practices. Introduction to Spanish Language and best international traveling practices are also discussed.</p>	1
IND115	<p>GLOBAL FOCUS SEMINAR</p> <p>This one-credit seminar is intended to foster student intellectual involvement in the Chatham Global Focus Program. Course participants attend a series of Global Focus events, lectures, and programs, and complete a specified number of assignments.</p>	1
IND123	<p>PROTOTYPING & DESIGN FOR PRODUCT DEVELOPMENT</p> <p>This course is designed for students with little or no background in design or product development. It provides an introductory explanation of the design process, incorporating design thinking and lean entrepreneurship principles, as well as prototyping for developing tangible products.</p>	1
IND127	<p>DRUGS AROUND THE WORLD</p> <p>One semester lecture course exploring drugs in various cultures around the world. The social, economic, and physical effects of drugs on various communities will be examined. The relationship between cultures of other countries and the United States will be emphasized.</p>	3

Course Code	Course Information	Credits
IND130	<p>SOCIAL ACTIVISM INSTITUTE</p> <p>Through this course, students will learn about service, civic work, and advocacy in specific fields from faculty and a professional in that field. Professionals will provide students with information about their background, professional competencies needed to pursue a career in their field, and the challenges and rewards of their work.</p>	1
IND170	<p>FY RESEARCH IN SCIENCE</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
IND175	<p>INTRODUCTION TO NURSING RESOURCES</p> <p>This course will teach nursing students how to develop and apply skills in locating, evaluating, and synthesizing information from a variety of library and information resources. The work completed in this course will help nursing students become more efficient in areas of evidence-based practice.</p>	1
IND200W	<p>INTRODUCTION TO SCIENTIFIC RESEARCH</p> <p>This course introduces students to all phases of research from conceptualization of the research question to the interpretation of results. Topics include why and how to conduct research, the scientific method, issues key to research (research design, causation, data collection). Statistical software packages and basic statistical analysis will be covered.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	2
IND207	<p>SYSTEMS OF SOCIAL INDENTITY, POWER, AND JUSTICE</p>	3

Course Code	Course Information	Credits
	<p>This course examines the concept of power and how it is applied in both public and private spaces. We examine philosophical definitions of power, how power is wielded in various institutional settings and how power imbalances are demonstrated in several contemporary issue debates.</p>	
IND210	<p>CHATHAM SEMESTER INTERNATIONAL INTERNSHIP PREPARATION SEMINAR</p> <p>This course will prepare international students to conduct an internship search and work in a U.S. for profit or non-profit organization. Students will learn about U.S. workplace culture, U.S. interviewing techniques, networking and job search skills, and developing a professional web presence.</p>	3
IND213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
IND245	<p>FOSTERING INCLUSIVE COMMUNITIES IN RESIDENTIAL SETTINGS</p> <p>This course provides Residential Assistants with skills to implement an inclusive community and facilitate interactions with residents. Students will gain understanding of identity development, impact of inequality and privilege in inclusive communities, facilitating conversations in residence halls, and learn ally behaviors effective for residential staff.</p>	3
IND246	<p>INTERGROUP DIALOGUE FACILITATOR TRAINING</p> <p>These courses give students a foundation to facilitate intergroup dialogue classes and workshops. The topics of this course include group facilitation skills; individual and group social identity development; impact of prejudice and stereotyping; difference and dominance and the nature of social oppression; culture, culture cues, and judgements.</p>	3

Course Code	Course Information	Credits
IND247	<p>INTERGROUP DIALOGUE SEMINAR</p> <p>Students participate in conversations and readings across social identities, discuss and explore experiences across social identities and institutional contexts, and examine historical, psychological, and sociological materials leading to understanding of self and other. Social identity topics will rotate and focus on one identity (race, class, gender, sexual orientation, etc.).</p>	3
IND248	<p>PRACTICUM IN FACILITATING INTERGROUP DIALOGUES</p> <p>This course supports students as they apply and improve their facilitation skills as dialogue course facilitators. It includes supporting students to plan classes in the intergroup dialogues course that they facilitate, deepen their awareness of their identity, and learn to facilitate through conflict.</p>	4
IND250	<p>CAREERS FOR THE DIGITAL AGE</p> <p>This course explores computing and digital skills that are essential to professionals in the 21st century across disciplines. Topics include the Internet, mobile technologies, coding, the collection, tracking, management and analytics of Big Data. Students will examine how these digital technologies may transform industries from music to healthcare.</p>	1
IND310	<p>CHATHAM SEMESTER INTERNATIONAL INTERNSHIP REFLECTION SEMINAR</p> <p>This class will allow international non degree academic students participating in the Chatham Internship to reflect on their internship experience using academic journals and course texts.</p> <p>Pre-Requisites: Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> IND210 : Chatham Semester International Internship Preparation Seminar 	
IND350	<p>SCIENTIFIC RESEARCH METHODS</p> <p>This course serves as an introduction to research literature and research methodology in the sciences. Students prepare a research proposal including literature review, experimental design and methods, budget, timetable, and bibliography. Other topics include professional presentation techniques and research ethics. The student's major department must approve proposals prior to the Tutorial.</p>	2
IND350W	<p>SCIENTIFIC RESEARCH METHODS</p> <p>This course serves as an introduction to research literature and research methodology in the sciences. Topics include professional writing, experimental design, presentation techniques, and professional and research ethics. Credit is not given for both IND350W and EXS301W.</p>	2
IND491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> XXX123 : Permission of Instructor 	1
INTACT301	<p>INTERNSHIP - ACCOUNTING</p> <p>Internship - Accounting</p>	1
INTACT302	<p>INTERNSHIP - ACCOUNTING</p> <p>Internship - Accounting</p>	2
INTACT303	<p>INTERNSHIP - ACCOUNTING</p>	3

Course Code	Course Information	Credits
	Internship - Accounting	
INTACT305	INTERNSHIP - ACCOUNTING	5
INTACT306	INTERNSHIP - ACCOUNTING Internship - Accounting	6
INTACT308	INTERNSHIP - ACCOUNTING Internship - Accounting	8
INTART301	INTERNSHIP - ART	1
INTART302	INTERNSHIP - ART Internship - Art	2
INTART303	INTERNSHIP - ART Internship - Art	3
INTART304	INTERNSHIP - ART Internship - Art	4
INTBIO301	INTERNSHIP - BIOLOGY Internship - Biology	1
INTBIO302	INTERNSHIP - BIOLOGY Internship - Biology	2

Course Code	Course Information	Credits
INTBIO303	INTERNSHIP - BIOLOGY Internship - Biology	3
INTBIO305	INTERNSHIP - BIOLOGY Internship - Biology	5
INTBIO307	INTERNSHIP - BIOLOGY	7
INTBIO309	INTERNSHIP - BIOLOGY	9
INTBUS301	INTERNSHIP - BUSINESS	1
INTBUS302	INTERNSHIP - BUSINESS Internship - Business	2
INTBUS303	INTERNSHIP - BUSINESS The Chatham University Internship program provides students with the opportunity to acquire hands-on work experience in a professional setting. The student gains metacognitive insights, deep learning, and practical skills by reflecting on the internship experience under the supervision of an academic advisor.	3
INTBUS305	INTERNSHIP - BUSINESS Internship - Business	5
INTBUS306	INTERNSHIP - BUSINESS Internship - Business	6

Course Code	Course Information	Credits
INTBUS409	INTERNSHIP - BUSINESS	9
INTCHM301	INTERNSHIP - CHEMISTRY Internship - Chemistry	1
INTCHM302	INTERNSHIP - CHEMISTRY Internship - Chemistry	2
INTCHM303	INTERNSHIP - CHEMISTRY Internship - Chemistry	3
INTCOM301	INTERNSHIP - COMMUNICATION Internship - Communication	1
INTCOM302	INTERNSHIP - COMMUNICATION Internship - Communication	2
INTCOM303	INTERNSHIP - COMMUNICATION Internship - Communication	3
INTCOM303	INTERNSHIP - COMMUNICATION Internship - Communication	3
INTCOM305	INTERNSHIP - COMMUNICATION Internship - Communication	5
INTCOM306	INTERNSHIP - COMMUNICATION	6

Course Code	Course Information	Credits
	Internship - Communication	
INTCRM301	INTERNSHIP - CRIMINOLOGY Internship - Criminology	1
INTCRM302	INTERNSHIP - CRIMINOLOGY Internship - Criminology	2
INTCRM303	INTERNSHIP - CRIMINOLOGY Internship - Criminology	3
INTCRM304	INTERNSHIP - CRIMINOLOGY Internship - Criminology	4
INTCRM306	INTERNSHIP - CRIMINOLOGY Internship - Criminology	6
INTCST301	INTERNSHIP - CULTURAL STUDIES Internship - Cultural Studies	1
INTCST302	INTERNSHIP - CULTURAL STUDIES Internship - Cultural Studies	2
INTCST303	INTERNSHIP - CULTURAL STUDIES Internship - Cultural Studies	3
INTCST304	INTERNSHIP - CULTURAL STUDIES	4

Course Code	Course Information	Credits
	Internship - Cultural Studies	
INTDSA301	INTERNSHIP - DATA SCIENCE ANALYTICS Internship - Data Science Analytics	1
INTDSA302	INTERNSHIP - DATA SCIENCE ANALYTICS Internship - Data Science Analytics	2
INTDSA303	INTERNSHIP - DATA SCIENCE ANALYTICS Internship - Data Science Analytics	3
INTECN301	INTERNSHIP - ECONOMICS Internship - Economics	1
INTECN302	INTERNSHIP - ECONOMICS Internship - Economics	2
INTECN303	INTERNSHIP - ECONOMICS Internship - Economics	3
INTEDU301	INTERNSHIP - EDUCATION Internship - Education	1
INTEDU302	INTERNSHIP - EDUCATION Internship - Education	2
INTEDU303	INTERNSHIP - EDUCATION	3

Course Code	Course Information	Credits
	Internship - Education	
INTEDU407	INTERNSHIP - EDUCATION	7
	Internship - Education	
INTENG301	INTERNSHIP - ENGLISH	1
	Internship - English	
INTENG302	INTERNSHIP - ENGLISH	2
	Internship - English	
INTENG303	INTERNSHIP - ENGLISH	3
	Internship - English	
INTENG304	INTERNSHIP - ENGLISH	4
	Internship - English	
INTENG305	INTERNSHIP - ENGLISH	5
	Internship - English	
INTENV301	INTERNSHIP - ENVIRONMENTAL STUDIES	1
	Internship - Environmental Studies	
INTENV302	INTERNSHIP - ENVIRONMENTAL STUDIES	2
	Internship - Environmental Studies	
INTENV303	INTERNSHIP - ENVIRONMENTAL STUDIES	3

Course Code	Course Information	Credits
	Internship - Environmental Studies	
INTEXS301	INTERNSHIP - EXERCISE SCIENCE Internship - Exercise Science	1
INTEXS302	INTERNSHIP - EXERCISE SCIENCE Internship - Exercise Science	2
INTEXS303	INTERNSHIP - EXERCISE SCIENCE Internship - Exercise Science	3
INTEXS307	INTERNSHIP - EXERCISE SCIENCE Internship - Exercise Science	7
INTEXS309	INTERNSHIP - EXERCISE SCIENCE Internship - Exercise Science	9
INTFDT301	INTERNSHIP - FILM AND DIGITAL TECHNOLOGY Internship - Film and Digital Technology	1
INTFDT302	INTERNSHIP - FILM AND DIGITAL TECHNOLOGY Internship - Film and Digital Technology	2
INTFDT303	INTERNSHIP - FILM AND DIGITAL TECHNOLOGY Internship - Film and Digital Technology	3
INTFDT306	INTERNSHIP - FILM AND DIGITAL TECHNOLOGY	6

Course Code	Course Information	Credits
INTFRN303	INTERNSHIP - FRENCH Internship - French	3
INTHIS301	INTERNSHIP - HISTORY Internship - History	1
INTHIS302	INTERNSHIP - HISTORY Internship - History	2
INTHIS303	INTERNSHIP - HISTORY Internship - History	3
INTIAR301	INTERNSHIP - INTERIOR ARCHITECTURE Internship - Interior Architecture	1
INTIAR302	INTERNSHIP - INTERIOR ARCHITECTURE Internship - Interior Architecture	2
INTIAR303	INTERNSHIP - INTERIOR ARCHITECTURE Internship - Interior Architecture	3
INTIHS302	INTERNSHIP - INTEGRATIVE HEALTH STUDIES Internship - Integrative Health Studies	2
INTIHS303	INTERNSHIP - INTEGRATIVE HEALTH STUDIES Internship - Integrative Health Studies	3

Course Code	Course Information	Credits
INTIMM303	INTERNSHIP - IMMERSIVE MEDIA Internship - Immersive Media	3
INTISP303	INTERNSHIP - INTERNATIONAL STUDIES Internship - International Studies	3
INTMTH301	INTERNSHIP - MATHEMATICS Internship - Mathematics	1
INTMTH302	INTERNSHIP - MATHEMATICS Internship - Mathematics	2
INTMTH303	INTERNSHIP - MATHEMATICS Internship - Mathematics	3
INTMUS301	INTERNSHIP - MUSIC Internship - Music	1
INTMUS302	INTERNSHIP - MUSIC Internship - Music	2
INTMUS303	INTERNSHIP - MUSIC Internship - Music	3
INTPHY301	INTERNSHIP - PHYSICS Internship - Physics	1

Course Code	Course Information	Credits
INTPHY302	INTERNSHIP - PHYSICS Internship - Physics	2
INTPHY303	INTERNSHIP - PHYSICS Internship - Physics	3
INTPOL301	INTERNSHIP - POLITICAL SCIENCE	1
INTPOL302	INTERNSHIP - POLITICAL SCIENCE Internship - Political Science	2
INTPOL303	INTERNSHIP - POLITICAL SCIENCE Internship - Political Science	3
INTPOL304	INTERNSHIP - POLITICAL SCIENCE Internship - Political Science	4
INTPOL305	INTERNSHIP - POLITICAL SCIENCE Internship: Political Science.	5
INTPOL306	INTERNSHIP - POLITICAL SCIENCE Internship - Political Science	6
INTPSY301	INTERNSHIP - PSYCHOLOGY Internship - Psychology	1
INTPSY302	INTERNSHIP - PSYCHOLOGY	2

Course Code	Course Information	Credits
	Internship - Psychology	
INTPSY303	INTERNSHIP - PSYCHOLOGY Internship - Psychology	3
INTPSY304	INTERNSHIP - PSYCHOLOGY Internship - Psychology	4
INTPSY305	INTERNSHIP - PSYCHOLOGY Internship - Psychology	5
INTPSY306	INTERNSHIP - PSYCHOLOGY	6
INTPSY309	INTERNSHIP - PSYCHOLOGY Internship - Psychology	9
INTPSY312	INTERNSHIP - PSYCHOLOGY Internship - Psychology	12
INTREL301	INTERNSHIP - RELIGION Internship - Religion	1
INTREL302	INTERNSHIP - RELIGION Internship - Religion	2
INTREL303	INTERNSHIP - RELIGION Internship - Religion	3

Course Code	Course Information	Credits
INTSSA301	INTERNSHIP - SOCIAL SERVICES ADMINISTRATION Internship - Social Services Administration	1
INTSSA302	INTERNSHIP - SOCIAL SERVICES ADMINISTRATION Internship - Social Services Administration	2
INTSSA303	INTERNSHIP - SOCIAL SERVICES ADMINISTRATION Internship - Social Services Administration	3
INTSSA304	INTERNSHIP - SOCIAL SERVICES ADMINISTRATION Internship - Social Services Administration	4
INTSUS301	INTERNSHIP - SUSTAINABILITY Internship - Sustainability	1
INTSUS302	INTERNSHIP - SUSTAINABILITY Internship - Sustainability Pre-Requisites: Complete the following course: • XXX123 : Permission of Instructor	2
INTSUS303	INTERNSHIP - SUSTAINABILITY Internship - Sustainability	3
INTSUS312	INTERNSHIP - SUSTAINABILITY Internship - Sustainability	12

Course Code	Course Information	Credits
INTSWK301	INTERNSHIP - SOCIAL WORK Internship - Social Work	1
INTSWK302	INTERNSHIP - SOCIAL WORK Internship - Social Work	2
INTSWK303	INTERNSHIP - SOCIAL WORK Internship - Social Work	3
INTWGS303	INTERNSHIP - WOMEN'S AND GENDER STUDIES Internship - Women's and Gender Studies	3
INTWST301	INTERNSHIP - WOMEN'S STUDIES Internship - Women's Studies	1
INTWST302	INTERNSHIP - WOMEN'S STUDIES Internship - Women's Studies	2
INTWST303	INTERNSHIP - WOMEN'S STUDIES Internship - Women's Studies	3
LAR534	SOIL SCIENCE The focus of this course is to introduce students to the concept of soil as a natural resource, the basic physical, chemical and biological properties of soils; the management of soils for growth of terrestrial vegetation; the role of soils in buffering watersheds and aquifers from environmental pollutants; and the role of soils in natural and managed landscape and aquifer water budgets. The role of soils and associated vegetation in	3

Course Code	Course Information	Credits
	<p>global carbon budgets will also be discussed. Emphasis is placed on soil as an influential factor in urbanized and disturbed settings.</p>	
LNG101	<p>INTRODUCTION TO ARABIC LANGUAGE AND CULTURE I</p> <p>This elementary language acquisition course is intended for students with no previous knowledge of Arabic. It emphasizes the development of listening, reading, speaking, and writing skills and introduces the basic vocabularies and structures of global general education requirement.</p>	3
LNG101L	<p>INTRODUCTION TO ARABIC LANGUAGE AND CULTURE I - LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course compliments LNG 101.</p>	1
LNG102	<p>INTRODUCTION TO ARABIC LANGUAGE AND CULTURE II</p> <p>This course follows LNG101 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG102L	<p>INTRODUCTION TO ARABIC LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target</p>	1

Course Code	Course Information	Credits
LNG120	<p>language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 102.</p> <p>EAST ASIAN SCRIPTS: PHILOSOPHY, POETICS, PRACTICE</p> <p>An outline understanding of the language and writing systems of China, Japan, and Korea is a useful and intriguing step toward deeper work in East Asian studies. This course gives conceptual overview and practical guidance for basic pronunciation, writing, cross-cultural communication, and related arts.</p>	1
LNG121	<p>This elementary language acquisition course is intended for students with no previous knowledge of Chinese. It emphasizes the development of listening, reading, speaking, and writing skills and introduces students to the Hanyu pinyin romanization system and traditional characters. This course counts towards the International Certificate and fulfills a global general education requirement.</p> <p>INTRODUCTION TO CHINESE LANGUAGE AND CULTURE I</p>	3
LNG121L	<p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 121.</p> <p>INTRODUCTION TO CHINESE LANGUAGE AND CULTURE I-LAB</p>	1

Course Code	Course Information	Credits
LNG122	<p>INTRODUCTION TO CHINESE LANGUAGE AND CULTURE II</p> <p>This course follows LNG121 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG122L	<p>INTRODUCTION TO CHINESE LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 122.</p>	1
LNG131	<p>INTRODUCTION TO FRENCH LANGUAGE AND CULTURE I</p> <p>This elementary language acquisition course is intended for students with no previous knowledge of French. It emphasizes the development of listening, reading, speaking, and writing skills and introduces the basic vocabularies and structures of the language. This course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG131L	<p>INTRODUCTION TO FRENCH LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning.</p>	1

Course Code	Course Information	Credits
	This course complements LNG 131.	
LNG132	<p>INTRODUCTION TO FRENCH LANGUAGE AND CULTURE II</p> <p>This course follows LNG131 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG132L	<p>INTRODUCTION TO FRENCH LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 132.</p>	1
LNG141	<p>INTRODUCTION TO GERMAN LANGUAGE AND CULTURE I</p> <p>This elementary language acquisition course is intended for students with no previous knowledge of German. It emphasizes the development of listening, reading, speaking, and writing skills and introduces the basic vocabularies and structures of the language. This course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG141L	<p>INTRODUCTION TO GERMAN LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented</p>	1

Course Code	Course Information	Credits
LNG142	<p>toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 141.</p> <p>INTRODUCTION TO GERMAN LANGUAGE AND CULTURE II</p> <p>This course follows LNG141 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG142L	<p>INTRODUCTION TO GERMAN LANGUAGE AND CULTURE II - LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG142.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> <li>• LNG142 : Introduction to German Language and Culture II 	1
LNG151	<p>INTRODUCTION TO JAPANESE LANGUAGE AND CULTURE I</p> <p>This elementary language acquisition course is intended for students with no previous knowledge of Japanese. It emphasizes the development of listening, reading, speaking, and writing skills and introduces the basic vocabularies and structures of the language. This course counts towards the International Certificate and fulfills a global general education requirement.</p>	3

Course Code	Course Information	Credits
LNG151L	<p>INTRODUCTION TO JAPANESE LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 151.</p>	1
LNG152	<p>INTRODUCTION TO JAPANESE LANGUAGE AND CULTURE II</p> <p>This course follows LNG151 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG152L	<p>INTRODUCTION TO JAPANESE LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 152.</p>	1
LNG160	<p>SPANISH FOR HEALTH CARE WORKERS I</p> <p>Effective communication with Spanish speaking patients is an important aspect of the health care profession. This 1-credit course is designed to equip students with the basic Spanish language skills needed in interpersonal communication in clinical settings. Emphasis is on specialized vocabulary building and oral proficiency.</p>	1

Course Code	Course Information	Credits
LNG161	INTRODUCTION TO SPANISH LANGUAGE AND CULTURE I <p>This elementary language acquisition course is intended for students with no previous knowledge of Spanish. It emphasizes the development of listening, reading, speaking, and writing skills and introduces the basic vocabularies and structures of the language. This course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG161L	INTRODUCTION TO SPANISH LANGUAGE AND CULTURE I-LAB <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 161.</p>	1
LNG162	INTRODUCTION TO SPANISH LANGUAGE AND CULTURE II <p>This course follows LNG161 and builds on the structures and vocabularies already introduced. Its emphasis is on further developing the four language skills: listening, reading, speaking, and writing. It provides cultural context to complement linguistic proficiency. The course counts towards the International Certificate and fulfills a global general education requirement.</p>	3
LNG162L	INTRODUCTION TO SPANISH LANGUAGE AND CULTURE II-LAB <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance</p>	1

Course Code	Course Information	Credits
	linguistic knowledge gained through in-class language learning. This course complements LNG 162.	
LNG201	<p>INTERMEDIATE ARABIC LANGUAGE AND CULTURE I</p> <p>This course is designed for students with one year of college-level Arabic and follows LNG102. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG201L	<p>INTERMEDIATE ARABIC LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 201.</p>	1
LNG202	<p>INTERMEDIATE ARABIC LANGUAGE AND CULTURE II</p> <p>This course expands upon content learned in LNG201. It allows students to strengthen their listening, speaking, reading, and writing skills and deepen their understanding of Arabic and the Arabic-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG202L	<p>INTERMEDIATE ARABIC LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance</p>	1

Course Code	Course Information	Credits
	<p>linguistic knowledge gained through in-class language learning. This course complements LNG 202.</p>	
LNG221	<p>INTERMEDIATE CHINESE LANGUAGE AND CULTURE I</p> <p>This course is designed for students with one year of college-level Chinese and follows LNG122. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG221L	<p>INTERMEDIATE CHINESE LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 221.</p>	1
LNG222	<p>INTERMEDIATE CHINESE LANGUAGE AND CULTURE II</p> <p>This course expands upon content learned in LNG221. It allows students to strengthen their listening, speaking, reading, and writing skills and deepen their understanding of Chinese culture and language. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG222L	<p>INTERMEDIATE CHINESE LANGUAGE AND CULTURE II</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning</p>	1

Course Code	Course Information	Credits
	<p>and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 222.</p>	
LNG231	<p>INTERMEDIATE FRENCH LANGUAGE AND CULTURE I</p> <p>This course is designed for students with one year of college-level French and follows LNG132. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG231L	<p>INTERMEDIATE FRENCH LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 231.</p>	1
LNG232	<p>INTERMEDIATE FRENCH LANGUAGE AND CULTURE II</p> <p>This course expands upon content learned in LNG231. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the French-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG232L	<p>INTERMEDIATE FRENCH LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning</p>	1

Course Code	Course Information	Credits
LNG241	INTERMEDIATE GERMAN LANGUAGE AND CULTURE I This course is designed for students with one year of college-level German and follows LNG142. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.	3
LNG241L	INTERMEDIATE GERMAN LANGUAGE AND CULTURE I-LAB A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 241.	1
LNG242	INTERMEDIATE GERMAN LANGUAGE AND CULTURE II This course expands upon content learned in LNG241. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the German-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.	3
LNG242L	INTERMEDIATE GERMAN LANGUAGE AND CULTURE II-LAB	1

Course Code	Course Information	Credits
LNG251	<p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 242.</p> <p>This course is designed for students with one year of college-level Japanese and follows LNG152. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG251L	<p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 251.</p>	1
LNG252	<p>This course expands upon content learned in LNG251. It gives students the opportunity to strengthen their listening, speaking, reading, and writing skills and deepen their understanding of Japanese culture and language. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3

Course Code	Course Information	Credits
LNG252L	<p>INTERMEDIATE JAPANESE LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 252.</p>	1
LNG261	<p>INTERMEDIATE SPANISH LANGUAGE AND CULTURE I</p> <p>This course is designed for students with one year of college-level Spanish and follows LNG162. Emphasis is on deepening linguistic and cultural knowledge to further build language proficiency. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3
LNG261L	<p>INTERMEDIATE SPANISH LANGUAGE AND CULTURE I-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 261.</p>	1
LNG262	<p>INTERMEDIATE SPANISH LANGUAGE AND CULTURE II</p> <p>This course expands upon content learned in LNG261. It allows students to review grammar and transition from basic communication to more in-depth spoken and written discussions of the Spanish-speaking world. This course counts towards the International Certificate and International Studies major. It fulfills a global general education requirement.</p>	3

Course Code	Course Information	Credits
LNG262L	<p>INTERMEDIATE SPANISH LANGUAGE AND CULTURE II-LAB</p> <p>A deepened understanding of the cultural values of the target language culture is a critical component of language learning and "world readiness." This course provides a platform oriented toward social and cultural experience, in order to enhance linguistic knowledge gained through in-class language learning. This course complements LNG 262.</p>	1
LNG313	<p>SPECIAL TOPICS</p> <p>This course will cover in-depth, topical analysis of contemporary issues in the discipline not covered in other courses in the program.</p>	3
LNG560	<p>SPANISH FOR HEALTH CARE WORKERS</p> <p>Effective communication with Spanish-speaking patients is an important aspect of the health care profession. This 1-credit course is designed to equip students with the basic Spanish language skills needed in interpersonal communication in clinical settings. Emphasis is on specialized vocabulary building and oral proficiency.</p>	1
MTH103	<p>MATHEMATICAL REASONING</p> <p>This course is designed for the non-science major, to give a new outlook on mathematics and to provide a sense of the beauty and applicability of mathematics in our world. Topics are primarily related to geometry and include shapes in two and three dimensions, conic sections, topology, fractals and applied geometry.</p>	3
MTH104	STATISTICS FOR EVERYDAY LIFE	3

Course Code	Course Information	Credits
	One semester course covering descriptive statistics, statistical measures and distributions, decision making under uncertainty, applications of probability to statistical inference, and linear correlation. Particular emphasis on examples drawn from real world situations. Fulfills Chatham's quantitative reasoning requirement.	
MTH105	<p>COLLEGE ALGEBRA</p> <p>The study of real numbers, linear equations and inequalities, polynomials, rational expressions, roots and radicals, quadratic equations and inequalities, graphs, systems of linear equations, conics, quadratic functions, and inverse functions. Three hours of class per week.</p>	3
MTH108	<p>PRECALCULUS</p> <p>Development of essential skills in algebra and trigonometry. Topics include the coordinate system, functions and their graphs, solutions of equations and inequalities, introduction to transcendental functions, trigonometric functions and their graphs, trigonometric identities, and the historical and cultural significance of mathematics.</p>	3
MTH110	<p>ELEMENTARY STATISTICS</p> <p>Topics include statistical measures and distributions, decision making under uncertainty, application of probability to statistical inference, linear correlation, introduction to nonparametric statistical methods, and application to problems drawn from the natural and social sciences. Three hours of class per week. Three hours of class per week.</p>	3
MTH151	<p>CALCULUS I</p> <p>This is the first course in the calculus sequence. Topics include differential and integral calculus for algebraic and trigonometric functions with applications. Four hours of class per week.</p>	4

Course Code	Course Information	Credits
MTH152	<p>CALCULUS II</p> <p>This is the second course in the calculus sequence. Topics include differential and integral calculus for the transcendental functions, advanced methods of integration, and infinite sequences and series.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 : Calculus I 	4
MTH215W	<p>INTRODUCTION TO PROOF</p> <p>This course introduces students to the process of reading, understanding and writing rigorous mathematical arguments. Additionally, students will become familiar with computer software used for analyzing math problems and typesetting mathematical documents. This course is a pre-requisite for many upper-level math courses and is intended to help students transition from problem-solving oriented classes such as Calculus into courses focused on understanding and writing proofs. Topics include: basic logic, introductory set theory, functions and relations, and quantifiers.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • MTH151 : Calculus I • MTH152 : Calculus II 	4
MTH221	<p>LINEAR ALGEBRA</p> <p>Topics include finite dimensional vector spaces, geometry of \mathbb{R}, linear functions, systems of linear equations, and theory of matrices and determinants.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 : Calculus I 	3

Course Code	Course Information	Credits
MTH222	MULTIVARIATE AND VECTOR CALCULUS <p>An introduction to multivariate calculus using vector spaces, partial differentiation and multiple integration, calculus of vector functions, applications to extremum problems, and differential equations. Three hours of class per week.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 : Calculus II 	3
MTH241	DIFFERENTIAL EQUATIONS <p>Introduction to differential equations. Topics include first-order and linear equations, systems of equations, series solutions, and Laplace transform methods with computer-aided study of numerical solutions, and introduction to partial differential equations, and Fourier series. Three hours of class per week.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • MTH152 : Calculus II 	3
MTH244	DISCRETE MATHEMATICS <p>This course is an introduction to the fundamental logic and mathematical concepts of discrete quantities, as employed in digital computers. Emphasis will be on the careful and precise expression of ideas. Topics include sets and logic, relations and functions, proof techniques, algorithms, combinatorics, discrete probability, graphs, and trees. Three hours of class per week.</p>	3
MTH256	THE HISTORY AND THEORY OF NUMBERS <p>A survey of the history of our number system and theory of numbers. Topics covered include the development of number systems and mathematics from before the sixth century to the present, divisibility, factorization, arithmetic functions, quadratic reciprocity, primitive roots, and diophantine equations. Three hours of class per week.</p>	3

Course Code	Course Information	Credits
MTH310	<p>PROBABILITY</p> <p>An introduction to the theory of probability and the role of proofs in mathematics. Topics include discrete and continuous probability functions, random variables, expectations, moments, moment generating functions, the central limit theorem, and Chebyshev's inequality. Applications of probability such as queuing theory, Markov processes, and reliability theory also will be covered. Three hours of class per week.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• MTH152 : Calculus II 	3
MTH327	<p>ADVANCED ANALYSIS</p> <p>Foundations for abstract analysis, real and complex number systems, elements of point set topology and limits, continuity, and derivatives.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• MTH215W : Introduction to Proof <li>• MTH222 : Multivariate and Vector Calculus 	3
MTH341	<p>ABSTRACT ALGEBRA</p> <p>Introduction to elements of modern abstract algebra, including</p>	3

Course Code	Course Information	Credits
	<p>rings, groups, and fields.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MTH221 : Linear Algebra 	
MTH418	<p>MATHEMATICS SEMINAR</p> <p>A study of some specialized topic in mathematics not ordinarily treated in one of the regular course offerings. Three hours of class per week.</p>	3
MTH490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • IND350 : Scientific Research Methods 	3
MTH493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
MTH498	<p>TUTORIAL: MATHEMATICS</p>	4

Course Code	Course Information	Credits
MTH499	TUTORIAL: MATHEMATICS	4
MTH562	<p>NUMERICAL METHODS AND MATHEMATICAL MODELING</p> <p>Numerical methods and mathematical models used in computational science, including techniques for solving scientific problems, scientific visualization, and distributed and massively parallel architecture.</p>	3
MUA100	<p>PIANO</p> <p>One 30-minute lesson per week. Additional Fee(s): Applied music fee.</p>	1
MUA101	<p>PIANO</p> <p>One 30-minute lesson per week. Additional Fee(s): Applied music fee.</p>	1
MUA102	<p>VOICE</p> <p>One 30-minute lesson per week. Additional Fee(s): Applied music fee.</p>	1
MUA103	<p>VOICE</p> <p>One 30-minute lesson per week. Additional Fee(s): Applied music fee.</p>	1
MUA104B	<p>PIANO LEVEL I</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA104C	<p>PIANO LEVEL I</p>	3

Course Code	Course Information	Credits
	One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	
MUA105B	PIANO LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA105C	PIANO LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA106B	VOICE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA106C	VOICE LEVEL I One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.	3
MUA107B	VOICE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA107C	VOICE LEVEL I One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.	3
MUA108B	GUITAR LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied	2

Course Code	Course Information	Credits
	music fee.	
MUA108C	GUITAR LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA109B	GUITAR LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA109C	GUITAR LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA110B	VIOLIN LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA110C	VIOLIN LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA111B	VIOLIN LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA111C	VIOLIN LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA112B	VIOLA LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA112C	VIOLA LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA113B	VIOLA LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA113C	VIOLA LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA114B	CELLO LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA114C	CELLO LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA115B	CELLO LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA115C	CELLO LEVEL I	3

Course Code	Course Information	Credits
	One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	
MUA116B	DOUBLE BASS LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA116C	DOUBLE BASS LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA117B	DOUBLE BASS LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA117C	DOUBLE BASS LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA118B	HARP LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA118C	HARP LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA119B	HARP LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied	2

Course Code	Course Information	Credits
	music fee.	
MUA119C	HARP LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA120B	FLUTE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA120C	FLUTE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA121B	FLUTE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA121C	FLUTE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA122B	OBOE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA122C	OBOE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA123B	OBOE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA123C	OBOE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA124B	CLARINET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA124C	CLARINET LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA125B	CLARINET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA125C	CLARINET LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA126B	BASSOON LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
MUA126C	BASSOON LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA127B	BASSOON LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA127C	BASSOON LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA128B	SAXOPHONE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA128C	SAXOPHONE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA129B	SAXOPHONE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA129C	SAXOPHONE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA130B	HORN LEVEL I	2

Course Code	Course Information	Credits
	One 60-minute lesson per week. Additional Fee(s): Applied music fee.	
MUA130C	HORN LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA131B	HORN LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA131C	HORN LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA132B	TRUMPET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA132C	TRUMPET LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA133B	TRUMPET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA133C	TRUMPET LEVEL I One 60-minute lesson per week, plus performance. Additional	3

Course Code	Course Information	Credits
	Fee(s): Applied music fee.	
MUA134B	TROMBONE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA134C	TROMBONE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA135B	TROMBONE LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA135C	TROMBONE LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA136B	EUPHONIUM LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA136C	EUPHONIUM LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA137B	EUPHONIUM LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
MUA137C	EUPHONIUM LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA138B	TUBA LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA138C	TUBA LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA139B	TUBA LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA139C	TUBA LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA140B	PERCUSSION LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA140C	PERCUSSION LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA141B	PERCUSSION LEVEL I	2

Course Code	Course Information	Credits
	One 60-minute lesson per week. Additional Fee(s): Applied music fee.	
MUA141C	PERCUSSION LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA142B	DRUM SET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA142C	DRUM SET LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA143B	DRUM SET LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA143C	DRUM SET LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA144B	ELECTRIC BASS LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA144C	ELECTRIC BASS LEVEL I One 60-minute lesson per week, plus performance. Additional	3

Course Code	Course Information	Credits
	Fee(s): Applied music fee.	
MUA145B	ELECTRIC BASS LEVEL I One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA145C	ELECTRIC BASS LEVEL I One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA146B	COMPOSITION LEVEL I Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.	2
MUA146C	COMPOSITION LEVEL I Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.	3
MUA147B	COMPOSITION LEVEL I Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in	2

Course Code	Course Information	Credits
	collaboration with the instructor.	
MUA147C	<p>COMPOSITION LEVEL I</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p>	3
MUA204B	<p>PIANO LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA204C	<p>PIANO LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA205B	<p>PIANO LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA204B : Piano Level II • MUA204C : Piano Level II 	2
MUA205C	<p>PIANO LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA204B : Piano Level II 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • MUA204C : Piano Level II 	
MUA206B	<p>VOICE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA206C	<p>VOICE LEVEL II</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA207B	<p>VOICE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA206B : Voice Level II • MUA206C : Voice Level II 	2
MUA207C	<p>VOICE LEVEL II</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA206B : Voice Level II • MUA206C : Voice Level II 	3
MUA208B	<p>GUITAR LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA208C	<p>GUITAR LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional</p>	3

Course Code	Course Information	Credits
	Fee(s): Applied music fee.	
MUA209B	<p>GUITAR LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA208B : Guitar Level II • MUA208C : Guitar Level II 	2
MUA209C	<p>GUITAR LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA208B : Guitar Level II • MUA208C : Guitar Level II 	3
MUA210B	<p>VIOLIN LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee</p>	2
MUA210C	<p>VIOLIN LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA211B	<p>VIOLIN LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA210B : Violin Level II 	2

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • MUA210C : Violin Level II 	
MUA211C	<p>VIOLIN LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA210B : Violin Level II • MUA210C : Violin Level II 	3
MUA212B	<p>VIOLA LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA212C	<p>VIOLA LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA213B	<p>VIOLA LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA212B : Viola Level II • MUA212C : Viola Level II 	2
MUA213C	<p>VIOLA LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA212B : Viola Level II • MUA212C : Viola Level II 	3

Course Code	Course Information	Credits
MUA214B	<p>CELLO LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA214C	<p>CELLO LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA215B	<p>CELLO LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA214B : Cello Level II • MUA214C : Cello Level II 	2
MUA215C	<p>CELLO LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA214B : Cello Level II • MUA214C : Cello Level II 	3
MUA216B	<p>DOUBLE BASS LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA216C	<p>DOUBLE BASS LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
MUA217B	<p>DOUBLE BASS LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA216B : Double Bass Level II • MUA216C : Double Bass Level II 	2
MUA217C	<p>DOUBLE BASS LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA216B : Double Bass Level II • MUA216C : Double Bass Level II 	3
MUA218B	<p>HARP LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA218C	<p>HARP LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA219B	<p>HARP LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA218B : Harp Level II • MUA218C : Harp Level II 	2

Course Code	Course Information	Credits
MUA219C	<p>HARP LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA218B : Harp Level II • MUA218C : Harp Level II 	3
MUA220B	<p>FLUTE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA220C	<p>FLUTE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA221B	<p>FLUTE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA220B : Flute Level II • MUA220C : Flute Level II 	2
MUA221C	<p>FLUTE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA220B : Flute Level II • MUA220C : Flute Level II 	2

Course Code	Course Information	Credits
MUA222B	OBOE LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA222C	OBOE LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA223B	OBOE LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA222B : Oboe Level II • MUA222C : Oboe Level II 	2
MUA223C	OBOE LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA222B : Oboe Level II • MUA222C : Oboe Level II 	3
MUA224B	CLARINET LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA224C	CLARINET LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA225B	<p>CLARINET LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA224B : Clarinet Level II • MUA224C : Clarinet Level II 	2
MUA225C	<p>CLARINET LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA224B : Clarinet Level II • MUA224C : Clarinet Level II 	3
MUA226B	<p>BASSOON LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA226C	<p>BASSOON LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA227B	<p>BASSOON LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA226B : Bassoon Level II • MUA226C : Bassoon Level II 	2

Course Code	Course Information	Credits
MUA227C	<p>BASSOON LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA226B : Bassoon Level II • MUA226C : Bassoon Level II 	3
MUA228B	<p>SAXOPHONE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA228C	<p>SAXOPHONE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA229B	<p>SAXOPHONE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA228B : Saxophone Level II • MUA228C : Saxophone Level II 	2
MUA229C	<p>SAXOPHONE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA228B : Saxophone Level II • MUA228C : Saxophone Level II 	3

Course Code	Course Information	Credits
MUA230B	<p>HORN LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA230C	<p>HORN LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA231B	<p>HORN LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA230B : Horn Level II • MUA230C : Horn Level II 	2
MUA231C	<p>HORN LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA230B : Horn Level II • MUA230C : Horn Level II 	3
MUA232B	<p>TRUMPET LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA232C	<p>TRUMPET LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
MUA233B	<p>TRUMPET LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA232B : Trumpet Level II • MUA232C : Trumpet Level II 	2
MUA233C	<p>TRUMPET LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA232B : Trumpet Level II • MUA232C : Trumpet Level II 	3
MUA234B	<p>TROMBONE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA234C	<p>TROMBONE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA235B	<p>TROMBONE LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA234B : Trombone Level II • MUA234C : Trombone Level II 	2

Course Code	Course Information	Credits
MUA235C	<p>TROMBONE LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA234B : Trombone Level II • MUA234C : Trombone Level II 	3
MUA236B	<p>EUPHONIUM LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA236C	<p>EUPHONIUM LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA237B	<p>EUPHONIUM LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA236B : Euphonium Level II • MUA236C : Euphonium Level II 	2
MUA237C	<p>EUPHONIUM LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA236B : Euphonium Level II • MUA236C : Euphonium Level II 	3

Course Code	Course Information	Credits
MUA238B	TUBA LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA238C	TUBA LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA239B	TUBA LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA238B : Tuba Level II • MUA238C : Tuba Level II 	2
MUA239C	TUBA LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA238B : Tuba Level II • MUA238C : Tuba Level II 	3
MUA240B	PERCUSSION LEVEL II One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA240C	PERCUSSION LEVEL II One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA241B	<p>PERCUSSION LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA240B : Percussion Level II • MUA240C : Percussion Level II 	2
MUA241C	<p>PERCUSSION LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA240B : Percussion Level II • MUA240C : Percussion Level II 	3
MUA242B	<p>DRUM SET LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA242C	<p>DRUM SET LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA243B	<p>DRUM SET LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA242B : Drum Set Level II • MUA242C : Drum Set Level II 	2

Course Code	Course Information	Credits
MUA243C	<p>DRUM SET LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA242B : Drum Set Level II • MUA242C : Drum Set Level II 	3
MUA244B	<p>ELECTRIC BASS LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA244C	<p>ELECTRIC BASS LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA245B	<p>ELECTRIC BASS LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA244B : Electric Bass Level II • MUA244C : Electric Bass Level II 	2
MUA245C	<p>ELECTRIC BASS LEVEL II</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA244B : Electric Bass Level II • MUA244C : Electric Bass Level II 	3

Course Code	Course Information	Credits
MUA246B	COMPOSITION LEVEL II Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.	2
MUA246C	COMPOSITION LEVEL II Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.	3
MUA247B	COMPOSITION LEVEL II Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA246B : Composition Level II • MUA246C : Composition Level II 	2
MUA247C	COMPOSITION LEVEL II Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in	3

Course Code	Course Information	Credits
	<p>collaboration with the instructor.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA246B : Composition Level II • MUA246C : Composition Level II 	
MUA304B	<p>PIANO LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA304C	<p>PIANO LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA305B	<p>PIANO LEVEL II</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA304B : Piano Level III • MUA304C : Piano Level III 	2
MUA305C	<p>PIANO LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA304B : Piano Level III • MUA304C : Piano Level III 	3
MUA306B	<p>VOICE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
MUA306C	<p>VOICE LEVEL III</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA307B	<p>VOICE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA306B : Voice Level III • MUA306C : Voice Level III 	2
MUA307C	<p>VOICE LEVEL III</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA306B : Voice Level III • MUA306C : Voice Level III 	3
MUA308B	<p>GUITAR LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA308C	<p>GUITAR LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA309B	<p>GUITAR LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied</p>	2

Course Code	Course Information	Credits
	<p>music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA308B : Guitar Level III • MUA308C : Guitar Level III 	
MUA309C	<p>GUITAR LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA308B : Guitar Level III • MUA308C : Guitar Level III 	3
MUA310B	<p>VIOLIN LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA310C	<p>VIOLIN LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA311B	<p>VIOLIN LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA310B : Violin Level III • MUA310C : Violin Level III 	3
MUA311C	<p>VIOLIN LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA310B : Violin Level III • MUA310C : Violin Level III 	
MUA312B	<p>VIOLA LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA312C	<p>VIOLA LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA313B	<p>VIOLA LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA312B : Viola Level III • MUA312C : Viola Level III 	2
MUA313C	<p>VIOLA LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA312B : Viola Level III • MUA312C : Viola Level III 	3
MUA314B	<p>CELLO LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
MUA314C	<p>CELLO LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA315B	<p>CELLO LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA314B : Cello Level III • MUA314C : Cello Level III 	2
MUA315C	<p>CELLO LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA314B : Cello Level III • MUA314C : Cello Level III 	3
MUA316B	<p>DOUBLE BASS LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA316C	<p>DOUBLE BASS LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA217B : Double Bass Level II • MUA217C : Double Bass Level II 	3

Course Code	Course Information	Credits
MUA317B	<p>DOUBLE BASS LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA316B : Double Bass Level III • MUA316C : Double Bass Level III 	2
MUA317C	<p>DOUBLE BASS LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA316B : Double Bass Level III • MUA316C : Double Bass Level III 	3
MUA318B	<p>HARP LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA318C	<p>HARP LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA319B	<p>HARP LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA318B : Harp Level III • MUA318C : Harp Level III 	2

Course Code	Course Information	Credits
MUA319C	<p>HARP LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA318B : Harp Level III • MUA318C : Harp Level III 	3
MUA320B	<p>FLUTE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA320C	<p>FLUTE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA321B	<p>FLUTE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA320B : Flute Level III • MUA320C : Flute Level III 	2
MUA321C	<p>FLUTE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA320B : Flute Level III • MUA320C : Flute Level III 	3

Course Code	Course Information	Credits
MUA322B	OBOE LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA322C	OBOE LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA323B	OBOE LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA322B : Oboe Level III • MUA322C : Oboe Level III 	2
MUA323C	OBOE LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA322B : Oboe Level III • MUA322C : Oboe Level III 	3
MUA324B	CLARINET LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA324C	CLARINET LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA325B	<p>CLARINET LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA324B : Clarinet Level III • MUA324C : Clarinet Level III 	2
MUA325C	<p>CLARINET LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA324B : Clarinet Level III • MUA324C : Clarinet Level III 	3
MUA326B	<p>BASSOON LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA326C	<p>BASSOON LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA327B	<p>BASSOON LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA326B : Bassoon Level III • MUA326C : Bassoon Level III 	2

Course Code	Course Information	Credits
MUA327C	<p>BASSOON LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA326B : Bassoon Level III • MUA326C : Bassoon Level III 	3
MUA328B	<p>SAXOPHONE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA328C	<p>SAXOPHONE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA329B	<p>SAXOPHONE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA328B : Saxophone Level III • MUA328C : Saxophone Level III 	2
MUA329C	<p>SAXOPHONE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA328B : Saxophone Level III • MUA328C : Saxophone Level III 	3

Course Code	Course Information	Credits
MUA330B	HORN LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA330C	HORN LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA331B	HORN LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA330B : Horn Level III • MUA330C : Horn Level III 	2
MUA331C	HORN LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA330B : Horn Level III • MUA330C : Horn Level III 	3
MUA332B	TRUMPET LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA332C	TRUMPET LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA333B	<p>TRUMPET LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA332B : Trumpet Level III • MUA332C : Trumpet Level III 	2
MUA333C	<p>TRUMPET LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA332B : Trumpet Level III • MUA332C : Trumpet Level III 	3
MUA334B	<p>TROMBONE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA334C	<p>TROMBONE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA335B	<p>TROMBONE LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA334B : Trombone Level III • MUA334C : Trombone Level III 	2

Course Code	Course Information	Credits
MUA335C	<p>TROMBONE LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA334B : Trombone Level III • MUA334C : Trombone Level III 	3
MUA336B	<p>EUPHONIUM LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA336C	<p>EUPHONIUM LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA337B	<p>EUPHONIUM LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA336B : Euphonium Level III • MUA336C : Euphonium Level III 	2
MUA337C	<p>EUPHONIUM LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA336B : Euphonium Level III • MUA336C : Euphonium Level III 	3

Course Code	Course Information	Credits
MUA338B	TUBA LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA338C	TUBA LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA339B	TUBA LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA338B : Tuba Level III • MUA338C : Tuba Level III 	2
MUA339C	TUBA LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA338B : Tuba Level III • MUA338C : Tuba Level III 	3
MUA340B	PERCUSSION LEVEL III One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA340C	PERCUSSION LEVEL III One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3

Course Code	Course Information	Credits
MUA341B	<p>PERCUSSION LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA340B : Percussion Level III • MUA340C : Percussion Level III 	2
MUA341C	<p>PERCUSSION LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA340B : Percussion Level III • MUA340C : Percussion Level III 	3
MUA342B	<p>DRUM SET LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA342C	<p>DRUM SET LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA343B	<p>DRUM SET LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA342B : Drum Set Level III • MUA342C : Drum Set Level III 	2

Course Code	Course Information	Credits
MUA343C	<p>DRUM SET LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA342B : Drum Set Level III • MUA342C : Drum Set Level III 	3
MUA344B	<p>ELECTRIC BASS LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA344C	<p>ELECTRIC BASS LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA345B	<p>ELECTRIC BASS LEVEL III</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA344B : Electric Bass Level III • MUA344C : Electric Bass Level III 	2
MUA345C	<p>ELECTRIC BASS LEVEL III</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA344B : Electric Bass Level III • MUA344C : Electric Bass Level III 	3

Course Code	Course Information	Credits
MUA346B	<p>COMPOSITION LEVEL III</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p>	2
MUA346C	<p>COMPOSITION LEVEL III</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p>	3
MUA347B	<p>COMPOSITION LEVEL III</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• MUA346B : Composition Level III <li>• MUA346C : Composition Level III 	2
MUA347C	<p>COMPOSITION LEVEL III</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in</p>	3

Course Code	Course Information	Credits
	<p>collaboration with the instructor.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA346B : Composition Level III • MUA346C : Composition Level III 	
MUA404B	<p>PIANO LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA404C	<p>PIANO LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA405B	<p>PIANO LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA404B : Piano Level IV • MUA404C : Piano Level IV 	2
MUA405C	<p>PIANO LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA404B : Piano Level IV • MUA404C : Piano Level IV 	3
MUA406B	<p>VOICE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
MUA406C	<p>VOICE LEVEL IV</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA407B	<p>VOICE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA406B : Voice Level IV • MUA406C : Voice Level IV 	2
MUA407C	<p>VOICE LEVEL IV</p> <p>One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA406B : Voice Level IV • MUA406C : Voice Level IV 	3
MUA408B	<p>GUITAR LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA408C	<p>GUITAR LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA409B	<p>GUITAR LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied</p>	2

Course Code	Course Information	Credits
	<p>music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA408B : Guitar Level IV • MUA408C : Guitar Level IV 	
MUA409C	<p>GUITAR LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA408B : Guitar Level IV • MUA408C : Guitar Level IV 	3
MUA410B	<p>VIOLIN LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA410C	<p>VIOLIN LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA411B	<p>VIOLIN LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA410B : Violin Level IV • MUA410C : Violin Level IV 	2
MUA411C	<p>VIOLIN LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA410B : Violin Level IV • MUA410C : Violin Level IV 	
MUA412B	<p>VIOLA LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA412C	<p>VIOLA LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA413B	<p>VIOLA LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA412B : Viola Level IV • MUA412C : Viola Level IV 	2
MUA413C	<p>VIOLA LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA412B : Viola Level IV • MUA412C : Viola Level IV 	3
MUA414B	<p>CELLO LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
MUA414C	<p>CELLO LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA415B	<p>CELLO LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA414B : Cello Level IV • MUA414C : Cello Level IV 	2
MUA415C	<p>CELLO LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA414B : Cello Level IV • MUA414C : Cello Level IV 	3
MUA416B	<p>DOUBLE BASS LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA416C	<p>DOUBLE BASS LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA417B	<p>DOUBLE BASS LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA416B : Double Bass Level IV • MUA416C : Double Bass Level IV 	
MUA417C	<p>DOUBLE BASS LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA416B : Double Bass Level IV • MUA416C : Double Bass Level IV 	3
MUA418B	<p>HARP LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA418C	<p>HARP LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA419B	<p>HARP LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA418B : Harp Level IV • MUA418C : Harp Level IV 	2
MUA419C	<p>HARP LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA418B : Harp Level IV • MUA418C : Harp Level IV 	
MUA420B	<p>FLUTE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA420C	<p>FLUTE LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA421B	<p>FLUTE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA420B : Flute Level IV • MUA420C : Flute Level IV 	2
MUA421C	<p>FLUTE LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA420B : Flute Level IV • MUA420C : Flute Level IV 	3
MUA422B	<p>OBOE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
MUA422C	OBOE LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA423B	OBOE LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA422B : Oboe Level IV • MUA422C : Oboe Level IV 	2
MUA423C	OBOE LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA422B : Oboe Level IV • MUA422C : Oboe Level IV 	3
MUA424B	CLARINET LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA424C	CLARINET LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA425B	CLARINET LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA424B : Clarinet Level IV • MUA424C : Clarinet Level IV 	
MUA425C	<p>CLARINET LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA424B : Clarinet Level IV • MUA424C : Clarinet Level IV 	3
MUA426B	<p>BASSOON LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA426C	<p>BASSOON LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA427B	<p>BASSOON LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA426B : Bassoon Level IV • MUA426C : Bassoon Level IV 	2
MUA427C	<p>BASSOON LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA426B : Bassoon Level IV • MUA426C : Bassoon Level IV 	
MUA428B	SAXOPHONE LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA428C	SAXOPHONE LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA429B	SAXOPHONE LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA428B : Saxophone Level IV • MUA428C : Saxophone Level IV 	2
MUA429C	SAXOPHONE LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA428B : Saxophone Level IV • MUA428C : Saxophone Level IV 	2
MUA430B	HORN LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
MUA430C	<p>HORN LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA431B	<p>HORN LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA430B : Horn Level IV • MUA430C : Horn Level IV 	2
MUA431C	<p>HORN LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA430B : Horn Level IV • MUA430C : Horn Level IV 	3
MUA432B	<p>TRUMPET LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA432C	<p>TRUMPET LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA433B	<p>TRUMPET LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA432B : Trumpet Level IV • MUA432C : Trumpet Level IV 	
MUA433C	<p>TRUMPET LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA432B : Trumpet Level IV • MUA432C : Trumpet Level IV 	3
MUA434B	<p>TROMBONE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA434C	<p>TROMBONE LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA435B	<p>TROMBONE LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA434B : Trombone Level IV • MUA434C : Trombone Level IV 	2
MUA435C	<p>TROMBONE LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA434B : Trombone Level IV • MUA434C : Trombone Level IV 	
MUA436B	EUPHONIUM LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA436C	EUPHONIUM LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA437B	EUPHONIUM LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA436B : Euphonium Level IV • MUA436C : Euphonium Level IV 	2
MUA437C	EUPHONIUM LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA436B : Euphonium Level IV • MUA436C : Euphonium Level IV 	3
MUA438B	TUBA LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
MUA438C	TUBA LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA439B	TUBA LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA438B : Tuba Level IV • MUA438C : Tuba Level IV 	2
MUA439C	TUBA LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA438B : Tuba Level IV • MUA438C : Tuba Level IV 	3
MUA440B	PERCUSSION LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA440C	PERCUSSION LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA441B	PERCUSSION LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA440B : Percussion Level IV • MUA440C : Percussion Level IV 	
MUA441C	<p>PERCUSSION LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA440B : Percussion Level IV • MUA440C : Percussion Level IV 	3
MUA442B	<p>DRUM SET LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUA442C	<p>DRUM SET LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3
MUA443B	<p>DRUM SET LEVEL IV</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUA442B : Drum Set Level IV • MUA442C : Drum Set Level IV 	2
MUA443C	<p>DRUM SET LEVEL IV</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA442B : Drum Set Level IV • MUA442C : Drum Set Level IV 	
MUA444B	ELECTRIC BASS LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee.	2
MUA444C	ELECTRIC BASS LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.	3
MUA445B	ELECTRIC BASS LEVEL IV One 60-minute lesson per week. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA444B : Electric Bass Level IV • MUA444C : Electric Bass Level IV 	2
MUA445C	ELECTRIC BASS LEVEL IV One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee. Pre-Requisites: Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • MUA444B : Electric Bass Level IV • MUA444C : Electric Bass Level IV 	3
MUA446B	COMPOSITION LEVEL IV Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate	2

Course Code	Course Information	Credits
	to their artistic projects. Specific goals are determined in collaboration with the instructor.	
MUA446C	<p>COMPOSITION LEVEL IV</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p>	3
MUA447B	<p>COMPOSITION LEVEL IV</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• MUA446B : Composition Level IV <li>• MUA446C : Composition Level IV 	2
MUA447C	<p>COMPOSITION LEVEL IV</p> <p>Students will work closely with the composition instructor to identify and articulate their personal artistic perspective, and develop sound or multimedia compositions that express this outlook. Students may also work on analytic projects that relate to their artistic projects. Specific goals are determined in collaboration with the instructor.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• MUA446B : Composition Level IV <li>• MUA446C : Composition Level IV 	3

Course Code	Course Information	Credits
MUS150	<p>HISTORY OF ROCK, POP AND SOUL</p> <p>This course explores the evolution of American and British popular music from about 1950 to the present day. Musical styles are studied and contextualized with an examination of related cultural, social and political trends. Attention is given to issues and constructions of race and gender as they relate to course material, particularly the changing role and status of women in American and British popular music. This course also introduces fundamental music terminology that is germane to the study of popular music.</p>	3
MUS152	<p>CLASS PIANO I</p> <p>This course develops functional piano skills through the study of music notation, major scales, introductory piano music, introductory keyboard harmony, improvisation, and other facets of keyboard-based musicianship.</p>	2
MUS153	<p>CLASS PIANO II</p> <p>This course continues to develop functional piano skills that were established in MUS152 through the study of music notation, major and minor scales, elementary piano music, elementary keyboard harmony, improvisation, and other facets of keyboard-based musicianship.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MUS152 : Class Piano I 	2
MUS159	<p>MUSIC FUNDAMENTALS</p> <p>The course introduces fundamental terminology and theoretical concepts associated with common practice Western art music. Specific topics covered include notation, scales, intervals, triads, rhythm, form and basic aural skills. This course provides the requisite knowledge necessary for MUS161: Music Theory I.</p>	3

Course Code	Course Information	Credits
MUS160	<p>THE ART OF MUSIC</p> <p>Through guided listening, students examine musical works and gain an understanding of the style of various composers and historical periods. Relevant cultural features are presented, and basic elements of music are introduced to enhance the appreciation of this art form.</p>	3
MUS161	<p>DIATONIC TONAL HARMONY</p> <p>The course covers principles of diatonic harmony and voice-leading, as well as species counterpoint and simple formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p>	4
MUS163	<p>INTRODUCTION TO MUSIC BUSINESS</p> <p>The course presents a broad overview of the music industry and covers topics such as recording, distribution, publishing, promotion, and artist management. Students will explore a range of career possibilities and develop strategies for pursuing career paths of interest.</p>	3
MUS171	<p>CHOIR</p> <p>Students prepare and perform a wide variety of choral literature for both women's and mixed voices. An audition is required as are two, two-hour rehearsals per week. Pass/fail grading only.</p>	2
MUS171	<p>CHOIR</p> <p>Students prepare and perform a variety of choral literature. Rehearsals that are 90-120 minutes in duration are held twice per week. Public performances occur at various points throughout the semester. An audition is required.</p>	1

Course Code	Course Information	Credits
MUS173	<p>INSTRUMENTAL ENSEMBLE</p> <p>Preparation and performance of chamber music for various ensembles.</p>	2
MUS173	<p>INSTRUMENTAL ENSEMBLE</p> <p>Students prepare and perform a variety of instrumental literature. Large ensemble rehearsals that are 90-120 minutes in duration are held twice per week. Chamber ensemble and pep band schedules may vary, but assume a comparable time commitment. Public performances occur at various points throughout the semester. An audition is required.</p>	1
MUS174	<p>JAZZ SURVEY</p> <p>Students explore the origin and development of jazz from its African origins to Dixieland and contemporary styles. They become familiar with jazz musicians and a wide variety of jazz styles through recorded music and, when possible, live performances.</p>	3
MUS195	<p>ORCHESTRAL INSTRUMENTS</p> <p>One 30-minute lesson per week. Corequisite: A music program course. Additional Fee(s): Applied music fee.</p>	1
MUS196	<p>ORCHESTRAL INSTRUMENTS</p> <p>One 60-minute lesson per week. Additional Fee(s): Applied music fee.</p>	2
MUS197	<p>ORCHESTRAL INSTRUMENTS</p> <p>One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.</p>	3

Course Code	Course Information	Credits
MUS204	<p>MUSIC AND FILM</p> <p>This course is intended for any level of undergraduate students with basic writing abilities and with no prior experience in music or film studies. This course provides a unique opportunity for students to study the interconnection between music and cinema in the context of ideas and themes that cross the boundaries of nation, language, and discipline.</p>	3
MUS205	<p>SOUND RECORDING BASICS</p> <p>In this course students learn basic principles of sound recording and apply those concepts to an area of personal significance such as music performance.</p>	3
MUS210	<p>MUSIC & THE NATURAL WORLD</p> <p>This course will explore the intersection of music and nature in musical thought and practice. Students will explore readings from a variety of historical periods to understand the variety of ways in which the relationship between music and nature has been conceived. Particular emphasis will be placed on Early Modern thought as well as living composers such as David Dunn, Annea Lockwood, John Luther Adams, Alvin Curran, Christopher Shultis, and other sonic ecologists who incorporate sounds from the natural environment into their work. This course fulfills an environmental general education mission course requirement.</p>	3
MUS252	<p>CHROMATIC TONAL HARMONY</p> <p>The course covers principles of chromatic harmony and voice-leading, as well as advanced formal structures, with an emphasis on analysis and stylistically appropriate composition. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.</p>	4

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MUS161 : Diatonic Tonal Harmony 	
MUS262	<p>INTRODUCTION TO COMPUTER MUSIC</p> <p>The course is a composition-focused introduction to computer music resources. Basic principles of digital audio and acoustics/psychoacoustics, as well as the history of electroacoustic and computer music, are introduced. A range of software applications are used for recording, editing, sequencing, synthesis, and processing. Discussion of composition strategies and aesthetic issues guide the use of such techniques in creative projects.</p>	3
MUS266	<p>WORLD MUSIC</p> <p>The course focuses on the music and related arts of selected major civilizations of the world, including India, China, and Japan as well as areas such as Southeast Asia, South America, and Africa. Emphasis is placed on the factors resulting in art that is sometimes quite different from Western music.</p>	3
MUS267	<p>HISTORY OF MUSIC I</p> <p>These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p>	3
MUS267W	<p>HISTORY OF MUSIC I</p> <p>These courses examine the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p>	3

Course Code	Course Information	Credits
MUS350	<p>LEGAL ISSUES IN MUSIC PERFORMANCE AND PRODUCTION</p> <p>The course focuses on legal issues specific to the performance and production of music. Topics include copyright, publishing, licensing, performance rights, royalties, artist management, and digital distribution.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MUS163 : Introduction to Music Business 	3
MUS351	<p>AUDIO PRODUCTION</p> <p>The course focuses on all stages of the audio production process and addresses both technical and logistical issues. Students gain experience in all roles in this process including producer and engineer.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MUS205 : Sound Recording Basics 	3
MUS352	<p>ADVANCED COMPUTER MUSIC</p> <p>This course focuses on advanced topics in computer music such as digital synthesis and signal processing, as well as more nuanced approaches to editing and sequencing. Focus is placed on critical listening and aesthetic considerations. Students will complete creative projects that are broad in scope both technically and aesthetically.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUS262 : Electronic/Computer Music Studio • MUS262 : Introduction to Computer Music 	3
MUS365	<p>20TH-CENTURY MUSIC ANALYSIS</p> <p>The course introduces students to art music of 20th-century through the technical analysis of pitch, rhythmic, formal, and</p>	3

Course Code	Course Information	Credits
	<p>timbral structures. Composers whose work is studied in this course include, but are not limited to, Arnold Schoenberg, Anton Webern, Igor Stravinsky, Pierre Boulez, Charles Ives, John Cage, Morton Feldman, and Iannis Xenakis.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MUS252 : Chromatic Tonal Harmony 	
MUS368W	<p>HISTORY OF MUSIC II</p> <p>This course is a continuation of History of Music I, and examines the growth and development of music as an art, music as a part of the whole of civilization, and representative works of all periods leading to an understanding of music itself.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • MUS267 : History of Music I • MUS267W : History of Music I 	3
MUS490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3
MUS492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p>	2

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
MUS493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
MUS498	TUTORIAL: MUSIC	4
MUS499	TUTORIAL: MUSIC	4
N101	<p>PROFESSIONAL CONCEPTS OF NURSING</p> <p>This course introduces the student to the role of the professional nurse. The concepts of communication, clinical decision making, professionalism and patient education are explored. In addition, the holistic aspects of patient care such as culture, spirituality, legal and ethical issues will be discussed. Tanner's clinical judgment model will provide the framework for the student's development of clinical judgment and decision making.</p>	3
N102	<p>FOUNDATIONAL CONCEPTS OF NURSING</p> <p>This course introduces the student to the foundational concepts of nursing practice across the lifespan. Basic care and comfort is explored through the concepts of nutrition, elimination, safety, mobility and sensory perception. Physical assessment is a major component of this course. The promotion of health and wellness is an underlying theme carried throughout the course. The student is introduced to basic foundational skills of nursing practice, including medication administration, through both the clinical and lab settings. Students engage in clinical experiences in inpatient medical-surgical units.</p>	9

Course Code	Course Information	Credits
N201	<p>PHYSIOLOGICAL CONCEPTS OF NURSING</p> <p>This course introduces the student to the physiological concepts of nursing practice across the lifespan. The fundamental aspects of oxygenation, perfusion, acid-based balance, fluid and electrolytes infection, immunity, inflammation, digestion and metabolism are explored. Through the integration of the nursing concepts, along with Tanner's clinical judgment model, the student begins to respond to identified patient problems in the clinical setting. Students engage in clinical experiences in acute medical-surgical units.</p>	10
N301	<p>COMPLEX INDIVIDUAL AND FAMILY NURSING CONCEPTS</p> <p>This course introduces the student to complex individual and family concepts of nursing practice. The course explores dynamic concepts across the lifespan. Family dynamics, reproduction and growth and development alterations are a major focus of the course. Concepts of mental health nursing are explored as they relate to the individual and the overall impact on the family. Through the integration of nursing concepts, along with Tanner's clinical judgment model, the student focuses on assisting the individual and family to adjust to health alterations across the lifespan. Students engage in various clinical experiences in the areas of pediatric, obstetric, geriatric and behavioral health.</p>	11
N320	<p>ADVANCED NURSING CONCEPTS</p> <p>This course introduces the student to advanced concepts of nursing practice. The course builds and expands on the concepts of oxygenation, perfusion, metabolism and infection that were previously introduced in Nursing 211. In addition, the advanced concepts of cellular regulation, intracranial regulation and alterations in tissue integrity are explored. Through the integration of nursing concepts, along with Tanner's clinical judgment model, the student engages in advanced clinical</p>	8

Course Code	Course Information	Credits
	<p>decision making in high acuity environments. Students engage in various clinical experiences that take place in stepdown units, critical care units and emergency departments.</p>	
N340	<p>TRANSITION INTO NURSING PRACTICE</p> <p>This course serves as the student's transition into the role of professional nursing practice. Leadership and management concepts are applied with an emphasis on safety and quality nursing care. Clinical is conducted through a preceptor experience where the student is given the opportunity to manage, delegate and prioritize care for multiple patients.</p>	6
N360	<p>NLCEX PREP COURSE</p> <p>This course provides the students with NCLEX preparation through content reviews and test taking strategies.</p>	2
NUR111	<p>PROFESSIONAL NURSING AND HEALTH CONCEPTS</p> <p>The student will be introduced to the role of the professional nurse based on the Nursing Standards for Professional Practice (Professionalism concept) and explore Tanner's Clinical Judgment model (Clinical Judgment concept) to develop a systematic approach to clinical decision making. The concept of communication will be explored utilizing self-discovery techniques creating a foundation upon which professional, therapeutic, and structured communication skills will be developed. The concept of informatics will be introduced identifying technologies to support the safe communication of health information. Navigation of the clinical information system will be experienced in the clinical setting. Course taught through UPMC: Shadyside School of Nursing.</p>	4
NUR112	<p>BASIC HEALTH CONCEPTS</p> <p>The course examines foundational, patient-centered concepts for nursing practice including the concepts of functional ability</p>	5

Course Code	Course Information	Credits
NUR113	<p>and optimal human function, mobility, and sensory perception. The patient centered concepts of motivation and adherence are examined as a foundation for teaching the student how to effectively educate patients for optimal self-management and function. Course taught through UPMC: Shadyside School of Nursing.</p> <p>HEALTH ASSESSMENT AND NURSING PRACTICE STRATEGIES</p> <p>This one credit laboratory experience is designed to complement the content in NUR112. The focus of this course is the development of the knowledge and skills needed to perform a complete physical assessment utilizing a systematic approach of data collection. This laboratory experience will permit the student to engage in developing cognitive and psychomotor skills to support nursing care related to functional ability, mobility, and patient education. Course taught through UPMC: Shadyside School of Nursing.</p>	1
NUR190	<p>CRITICAL THINKING FOR NURSES</p> <p>This one-credit course is designed to help nursing students enhance their study skills and test taking abilities. Through practice using NCLEX-RN style questions, students will gain a greater understanding of the materials learned in their nursing classes, comfort with testing, and preparation to sit for the licensure exam.</p>	1
NUR211	<p>HEALTH PROMOTION CONCEPTS</p> <p>The focus of this course is health promotion, disease prevention and healthy lifestyles. Students will begin to recognize how the environment influences health and to discriminate between healthy and unhealthy lifestyle choices. The interaction of the individual and the environment inclusive of cultural and spiritual variations as they affect health and wellness will be explored. The attributes and roles of the professional nurse are expanded</p>	4

Course Code	Course Information	Credits
NUR212	<p>and applied to diverse experiences. Concepts of health promotion, nutrition, glucose regulation and stress-coping will be emphasized. The clinical experience will focus on the role of the nurse in primary, secondary, and tertiary prevention. Course taught through UPMC: Shadyside School of Nursing.</p> <p>FAMILY HEALTH CONCEPTS</p> <p>The focus of this course are the development tasks and adaptation as they relate to lifespan and health with the incorporation of selected health issues, physical and developmental changes in the life cycle, health maintenance, and health problems. The concept of caregiving as it relates to family and health care will be introduced. The clinical experience will explore family health care within the community and health care settings. Course taught through UPMC: Shadyside School of Nursing.</p>	4
NUR215	<p>This course provides students with a foundation of basic pharmacologic concepts important for safe medication management. Through the exploration of medication classifications, students identify the implications to nursing practice. Building on the concepts presented in prerequisite nursing courses, the students explore medication management across the lifespan. Utilizing the nursing standards for professional practice, students will demonstrate skillfulness in safe medication management. Clinical laboratory will enable students to apply these essential aspects culminating in a medication math calculation competency exam. Course taught through UPMC: Shadyside School of Nursing.</p> <p>PHARMACOLOGY IN NURSING I</p>	2
NUR220	<p>This course will explore the nursing profession and nursing professionalism. Students will learn about different nursing roles and responsibilities, as well as education levels, licensure, and</p> <p>EXPLORING THE NURSING PROFESSION</p>	1

Course Code	Course Information	Credits
	certification. These and other topics will help students gain a greater understanding of the nursing profession.	
NUR300A	<p>MATERNAL CHILD NURSING</p> <p>This course encompasses nursing care and the promotion of growth and development of children and families. Emphasis is placed on the health promotional aspects of nursing care. Focus is on the needs of the young families in various life stages: perinatal through adolescence. The impact of acute and chronic diseases is explored from a holistic perspective utilizing a family centered approach. Students provide collaborative nursing care in both community and acute care settings. Additionally students will explore culturally appropriate nursing strategies to influence health. (4 credits theory/3 credits clinical)</p>	8
NUR300B	<p>NURSING IN ACUTE AND CHRONIC PSYCHIATRIC ILLNESS</p> <p>Shadyside School of Nursing Course</p>	8
NUR311	<p>HEALTH AND ILLNESS CONCEPTS</p> <p>This course focuses on the health and illness continuum as it applies to human experience across the lifespan. Promotion of health, prevention of disease and the role of the nurse caring for individuals experiencing illness are examined. Concepts for nursing practice from the themes of homeostasis and regulation, protection and movement, and care coordination are explored. Course taught through UPMC: Shadyside School of Nursing.</p>	6
NUR312	<p>MENTAL HEALTH CONCEPTS</p> <p>Incorporating prior knowledge of concepts of health, illness, stress, coping, and communication, this course focuses on the nursing care of individuals across the lifespan with acute and</p>	5

Course Code	Course Information	Credits
NUR315	<p>chronic alterations of emotions, cognitions, behaviors, and coping. The student will identify the impact these alterations have on the patient's ability to actively participate and collaborate with staff in meeting care needs in all healthcare settings. Communication strategies are emphasized as pathways to safe, effective care and interdisciplinary collaboration. Course taught through UPMC: Shadyside School of Nursing.</p> <p>PHARMACOLOGY IN NURSING II</p> <p>This course provides students with advanced pharmacologic concepts important for safe medication management. Through the exploration of medication classifications that are utilized in the treatment of more complex concepts, students identify the implications to nursing practice. Building on the concepts presented in pre-requisite nursing courses, the students explore medication management of acute and complex concepts. Utilizing the nursing standards for professional practice, students will demonstrate skillfulness in safe medication management. Clinical laboratory will enable students to apply these essential aspects. Course taught through UPMC: Shadyside School of Nursing.</p>	2
NUR380	<p>COMPLEX HEALTH CONCEPTS</p> <p>Using prior knowledge of concepts of health and illness, this course focuses on the nursing care of patients with acute illness and subsequent complex health alterations. The themes of homeostasis and regulation, oxygenation and perfusion and health care delivery are examined through concept analysis of acid-base balance, gas exchange, perfusion, intracranial regulation, clotting and palliation as applied to complex health issues. Family dynamics as it relates to acute illness are explored. The role of the professional nurse is further developed with an emphasis on interdisciplinary collaboration and communication. Clinical experiences will include higher acuity acute care environments and long term acute care Course</p>	7

Course Code	Course Information	Credits
	taught through UPMC: Shadyside School of Nursing.	
NUR382	<p>PROFESSIONAL NURSING AND HEALTH SYSTEM CONCEPTS</p> <p>This course is designed to facilitate the student's development and transition into the professional nursing role. Through guided experiences with registered nurse preceptors in the acute care setting, students are expected to integrate previous evidenced based learning. They will gradually increase accountability for the patient centered care of patients and their families experiencing functional and dysfunctional health patterns. The primary theme addressed in this course is care competencies for professional nurses that are examined through analysis of the concepts of health care quality and leadership. Course taught through UPMC: Shadyside School of Nursing.</p>	5
NUR399	<p>NCLEX PREPARATION</p> <p>This course prepares the student to take the NCLEX-RN exam through a variety of individual and group strategies. Students will utilize test taking strategies to respond to high level NCLEX style questions and integrate knowledge from previous courses to meet the requirements of benchmarking for licensure as an entry level nurse. Course taught through UPMC: Shadyside School of Nursing.</p>	2
NUR400A	<p>PROFESSIONAL ROLE FORMATION AND TRANSITION</p> <p>This final course in the program facilitates a transition into the professional nursing role. Through precepted clinical experiences, students are paired with RN preceptors gradually increasing responsibility and accountability for nursing care for groups of patients. Additionally, nursing conceptual frameworks supportive of new graduates' transition to the workforce will be examined. Theory related to patient care management, nursing leadership principles and care delivery to groups of patients will be presented. Collaboration and professional communication</p>	7

Course Code	Course Information	Credits
	will be emphasized. (2 credits theory/4.5 credits hours clinical)	
NUR400B	PROFESSIONAL ROLE FORMATION AND TRANSITION Shadyside School of Nursing Course	2
NUR402	HEALTH POLICY AND FINANCE FOR NURSES This course is designed to explore the role of Health and Public Policy, financial considerations, formulation and role of legislation and regulation, and ethical principles related to ANA Code of Ethics. Also addressed are topics including value-based purchasing, end-of-life care, living wills, advanced directives, social networking and Affordable Care Act.	3
NUR403W	WOMEN'S HEALTH NURSING This course will present an overview of issues relevant to women's health nursing. Nursing assessment techniques specific to female clients will be explored. Specific nursing interventions to promote women's health will be covered including: HIV, early detection of female cancers, reproductive health, mental health issues, osteoporosis, pharmacokinetics, nutrition, physical fitness.	3
NUR407	SCHOLARSHIP FOR EVIDENCE-BASED PRACTICE This course will enable students to critically review nursing research, choose a relevant clinical issue to examine, explore literature, and utilize nursing research in clinical practice. Ethical principles of nursing research, particularly protection of human subjects and other ethical accountabilities focusing on research utilization and evidence-based practice will be explored.	3
NUR409	CLINICAL PREVENTION, POPULATION AND ENVIRONMENTAL HEALTH	3

Course Code	Course Information	Credits
NUR409W	<p>This course provides a framework for the development of nursing interventions promoting population and environmental health for individuals and communities. Health promotion will be a significant focus of this course.</p> <p>CLINICAL PREVENTION, POPULATION AND ENVIRONMENTAL HEALTH</p> <p>This course provides a framework for the development of nursing interventions promoting population and environmental health for individuals and communities. Health promotion will be a significant focus of this course.</p>	3
NUR410	<p>This course is focused on various cultural and specialty populations. Multiple aspects of culture, vulnerability, and needs of individual populations will be analyzed and discussed. Content includes issues of ethics, social justice, health literacy, and barriers to care.</p> <p>GLOBAL CULTURAL DIVERSITY AND SPECIALTY POPULATION NURSING</p>	3
NUR411	<p>Multiple aspects of geriatric health and the aging population will be explored. Specific nursing interventions to promote older adult health will be covered including pharmacological considerations, nutrition, elder abuse, sexuality, coping with loss and grief, health and wellness promotion and the continuum of care.</p> <p>GERIATRIC NURSING</p>	3
NUR412	<p>This course will prepare the student for effective communication and collaboration amongst the interprofessional team with the goal of practicing high quality, safe, patient-centered care. Topics of quality improvement and interprofessional</p> <p>NURSING COMMUNICATION AND QUALITY IMPROVEMENT</p>	3

Course Code	Course Information	Credits
	communication will be emphasized.	
NUR499W	<p>NURSING LEADERSHIP AND PROFESSIONAL PRACTICUM</p> <p>This culminating course, which fulfills Chatham's internship requirement, encompasses various aspects of professionalism and leadership that students will encounter and utilize at all levels of nursing. Students will apply leadership concepts and decision-making skills while they complete their capstone project.</p>	4
NUR501	<p>SCIENTIFIC UNDERPINNINGS FOR PRACTICE</p> <p>This course examines principles and processes of evidence based practice as a strategy to guide clinical decision making, initiate practice change and improve nursing practice, including translating, evaluating and disseminating the evidence. Course elements include gaining knowledge of research design, statistical concepts and search strategies.</p>	3
NUR502	<p>APPLIED PATHOPHYSIOLOGY AND PHARMACOLOGY FOR PROFESSIONAL PRACTICE</p> <p>This course focuses on normal, acute, and chronic human physiological processes across the lifespan. Attention will be given to genetic/genomic content that may alter or result in an acute or chronic disease. Information gained in this course may assist the student in performing a physical health assessment based on the symptomatology of various acute and chronic illnesses.</p>	3
NUR503	<p>INFORMATICS FOUNDATION AND HEALTH CARE TECHNOLOGY</p> <p>This course will assist students within the graduate program to develop a strong foundation of knowledge in understanding the</p>	3

Course Code	Course Information	Credits
NUR504	ORGANIZATIONAL, QUALITY & SYSTEMS LEADERSHIP	3
NUR504	INTRODUCTION TO ORGANIZATIONAL LEADERSHIP IN NURSING	3
NUR505	APPLIED PHYSICAL ASSESSMENT AND HEALTH PROMOTION FOR PROFESSIONAL PRACTICE	3

impact technology and informatics has in the delivery of care across various settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.

The course content includes theories, research, and applications that focus on managing organizational behavior, quality improvement, and systems leadership within and across all aspects and of integrated health care delivery system. This course provides an overview of these topics with an emphasis on leadership decisions making.

Emphasizing leadership decision making, this course includes an overview of theories, research, and applications that focus on managing organizational behavior, quality improvement, and systems leadership across health care delivery systems. Students will learn how patient care systems are structured, processes developed, and outcomes affected by actions of leaders and employees.

This course focuses on health assessment of the adult, child, and infant. Concentration is focused on physical assessment techniques and taking a thorough health history in order to improve and ensure quality patient care. Genetic/genomic content will be reviewed accordingly with each physical system assessed as well as use of a pedigree for the family history portion of a health history.

Course Code	Course Information	Credits
NUR505	<p>HEALTH ASSESSMENT AND PROMOTION ACROSS THE LIFESPAN</p> <p>This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. The role of gender, genetics, and cultural influences in the context of health assessment and promotion will also be analyzed.</p>	3
NUR506	<p>PROFESSIONAL ROLE: COMMUNICATION & COLLABORATION FOR IMPROVING PT. OUTCOME</p> <p>This course will assist nurses to develop, analyze and apply skills in collaboration and communication, including the Interprofessional Education Collaborative's core competencies, effective communication strategies based on complexity and transformational leadership theory, skills of presentation and publication to improve patient care and advance nursing practice.</p>	3
NUR507	<p>HEALTH POLICY & ADVOCACY</p> <p>In this course students analyze and synthesize innovative approaches to complex issues in health care delivery at the local, state, and federal levels. Concepts such as politics, policy, market forces, and advocacy are used to assess how system approaches can affect health care delivery.</p>	3
NUR630	<p>HEALTH CARE ECONOMICS AND FINANCIAL MANAGEMENT</p> <p>The Health Care Economics and Financial Management course focuses on examination and understanding of health care financing and reimbursement concepts preparing a world ready nurse leader to function in a variety of health care delivery settings. Content focuses on concepts of budget and leadership management, influencing policy makers, and linking patient care outcomes to resource management.</p>	3

Course Code	Course Information	Credits
NUR631	INTEGRATING TECHNOLOGY INTO A HEALTH CARE ENVIRONMENT <p>This course will assist healthcare professionals within a graduate program to develop a strong foundation of knowledge in understanding the impact technology and informatics has in the delivery of care across various health settings. Students will be introduced to current and emerging technologies while exploring the impact on patient outcomes and staff satisfaction.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • NUR503 : Informatics Foundation and Health Care Technology 	3
NUR632	CURRICULUM DESIGN AND EVALUATION IN NURSING EDUCATION <p>This course focuses on the processes of curriculum development and evaluation that are critical responsibilities of nurse educators in schools of nursing, patient education programs, or staff development. Course goals include how the curriculum provides guidelines for program delivery and methods for evaluating program effectiveness.</p>	3
NUR640	LEADERSHIP FOR CHANGE <p>This course focuses on the needs of health care leaders to take health care delivery into the future through creative, innovative design initiatives focusing on a consumer driven health care delivery system. Content includes: variables impacting health care delivery systems, reimbursement and funding for design change, managing competition, and managing human and financial resources.</p>	3
NUR642	PROFESSIONAL ROLE AND RESPONSIBILITY OF THE NURSE EDUCATOR	3

Course Code	Course Information	Credits
NUR650	<p>The professional role and responsibility of the nurse educator course focuses on diverse roles and practice environments experienced by nurse educators. The course will provide novice and experienced nurse educators with guidelines for practice in classroom, clinical, staff development, and various educational settings. Academic and institutional policies, protocols and legal aspects will be explored.</p> <p>This course provides an overview of three distinct and necessary areas of leadership knowledge with an emphasis on managerial decision-making including legal aspects of health care, human resource management, and health policy. Students will work through specific scenarios in each of these areas to identify legal, ethical, and political issues.</p>	3
NUR651	<p>DATABASE MANAGEMENT FOR EVIDENCE-BASED DECISION MAKING</p> <p>This course is designed to assist the student in understanding the various database systems used within a healthcare setting. Key to this course is understanding how healthcare professionals can collect and extract data from database systems to assess the organizations performance and impact on patient outcomes.</p>	3
NUR652	<p>TEACHING STRATEGIES AND INFORMATION TECHNOLOGY FOR THE NURSE EDUCATOR</p> <p>This course will focus on strategies to develop knowledge and skill sets in pedagogy, teaching-learning theories, testing and measurement, and various educational technologies. An in-depth introduction to information technology that supports practice and improves patient care and outcomes will be explored.</p>	3

Course Code	Course Information	Credits
NUR660C	<p>HEALTH CARE LEADERSHIP PRACTICUM</p> <p>During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.</p>	3
NUR660D	<p>HEALTH CARE LEADERSHIP PRACTICUM</p> <p>During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 250 practice experience hours that incorporate direct patient care for the advanced practice nursing role.</p>	4
NUR661	<p>HEALTH CARE INFORMATICS PRACTICUM</p> <p>During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.</p>	3
NUR662	<p>HEALTHCARE EDUCATION PRACTICUM</p> <p>During this practicum course, students integrate program content and create a practice change project by working with professionals directly involved in improving patient care through quality, organizational processes, or safety. Course includes 60 practice experience hours that incorporate direct patient care for the advanced practice nursing role.</p>	3
NUR670C	<p>HEALTHCARE LEADERSHIP CAPSTONE</p>	3

Course Code	Course Information	Credits
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	
NUR670D	HEALTHCARE LEADERSHIP CAPSTONE	4
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 250 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	
NUR671	HEALTHCARE INFORMATICS CAPSTONE	3
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	
NUR672	HEALTHCARE EDUCATION CAPSTONE	3
	During this capstone course, students transition to the advanced practice nursing role while implementing their practice change project. Course includes 60 practice experience hours completed in collaboration with their preceptor and other identified healthcare professionals involved with direct patient care.	
NUR693A	INDEPENDENT STUDY	1
	Independent Study	

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
NUR693B	<p>INDEPENDENT STUDY:</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
NUR693C	<p>INDEPENDENT STUDY:</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
NUR697	<p>NURSING PRACTICE EXPERIENCE</p> <p>This course provides an opportunity to gain practice experience related to an area of interest. The student will select a practice area and work under the guidance of a preceptor. This course is for those planning admission to Chatham University's Doctor of Nursing Practice program and lack the required practice experience hours.</p>	3
NUR697A	<p>NURSING PRACTICE EXPERIENCE</p> <p>This course provides an opportunity for students to gain practice experience (PE) related to an area of interest. The student will select a practice area and work under the guidance of a preceptor. This course is designed for those planning admission to Chatham University's DNP program and lack the required practice experience hours.</p>	1
NUR697B	<p>NURSING PRACTICE EXPERIENCE</p>	2

Course Code	Course Information	Credits
NUR697C	<p>This course provides an opportunity for students to gain practice experience (PE) related to an area of interest. The student will select a practice area and work under the guidance of a preceptor. This course is designed for those planning admission to Chatham University's DNP program and lack the required practice experience hours.</p> <p>This course provides an opportunity for students to gain practice experience (PE) related to an area of interest. The student will select a practice area and work under the guidance of a preceptor. This course is designed for those planning admission to Chatham University's DNP program and lack the required practice experience hours.</p>	3
NUR700	<p>STRUCTURE & APP OF CONTEMPORARY NURSING KNOWLEDGE</p> <p>This course introduces the advanced practice nurse to the world of contemporary nursing knowledge, as formalized in conceptual models of nursing and nursing theories applied to clinical practice. There is emphasis on the metaparadigm, philosophies, conceptual models, theories, and empirical indicators linking them to clinical practice.</p>	3
NUR702	<p>DEVELOPING EVIDENCE-BASED PRACTICE</p> <p>This course prepares students with skills and competencies needed to build and assimilate knowledge for establishing a scholarly trajectory at a high level of complexity. This clinical course consists of 125 clinical hours and is the foundation for the culminating Capstone project focusing on improving practice.</p>	3
NUR703	<p>ETHICS AND PUBLIC POLICY IN HEALTHCARE DELIVERY</p>	3

Course Code	Course Information	Credits
NUR704	<p>This course focuses on ethical issues and public policy in healthcare. Students develop strategies to manage ethical dilemmas and analyze health policy to educate, advocate and provide leadership in shaping healthcare policy.</p> <p>QUALITY IMPROVEMENT IN HEALTH CARE</p> <p>This course focuses on quality improvement initiatives, including the protection of human subjects. The emphasis is on skills and competencies needed to provide leadership in quality and systems change. This course includes 125 clinical hours and is the foundation for the culminating Capstone project focusing on improved practice and outcomes.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• NUR700 : Structure & App of Contemporary Nursing Knowledge <li>• NUR702 : Developing Evidence-Based Practice 	3
NUR705	<p>ADVANCING PRACTICE: SCHOLARSHIP AND GRANT WRITING</p> <p>This course provides further investigation of evidence-based practice advancing nursing leadership and clinical outcomes. Students will develop skills for clinical scholarship including manuscript development and grant writing.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• NUR707 : Information Technology and Data-Driven Decision Making 	3
NUR706	<p>COMMUNICATION AND COLLABORATION FOR HEALTH CARE LEADERSHIP</p> <p>This course focuses on strategies to improve professional communication with peers, subordinates, and patients in the health care environment.</p>	3

Course Code	Course Information	Credits
NUR707	<p>INFORMATION TECHNOLOGY AND DATA-DRIVEN DECISION MAKING</p> <p>This course provides students with an opportunity to examine the value of technology and information systems to support evidence-based practice, guidelines and policy across various health settings. Various methods for gathering, managing, and synthesizing data will be introduced in order to conduct analyses for quality improvement, financial and outcome evaluations.</p>	3
NUR799	<p>CAPSTONE EXPERIENCE</p> <p>This course provides an opportunity for the student to implement and evaluate a planned evidence-based practice change project. This project lays the groundwork for future scholarship. This course culminates in a tangible and deliverable academic product derived from the practice immersion experience. A total of 250 clinical hours are included in the course.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • NUR707 : Information Technology and Data-Driven Decision Making 	6
OTD733	<p>GLOBAL HEALTH PERSPECTIVES: A FIELD EXPERIENCE</p> <p>This course is intended to provide an opportunity for occupational therapy doctoral students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of the visiting country 2) illustrate the role or potential role of occupational therapy in contributing to the health and wellbeing of the population and 3) reflect on their personal growth and on</p>	2

Course Code	Course Information	Credits
	the sustainability of their service.	
OTD740	<p>OCCUPATIONAL SCIENCE</p> <p>Professional students examine landmark occupational science literature and apply learned concepts of human nature and meaningful occupation to observation exercises within their practice focus.</p>	3
OTD741	<p>EVIDENCE-BASED PRACTICE</p> <p>This course is designed to provide the experienced therapist with a systematic method to critically evaluate and integrate the results of current scientific literature into the clinical decision making process. Students will participate in discussions and practical exercises to articulate clinical questions that can be answered through sources of scientific evidence. Strategies for searching relevant data bases, appraising and evaluating sources of evidence will be presented.</p>	3
OTD742	<p>ADVANCED PRACTICE CONCEPTS AND SKILLS</p> <p>Students apply The Occupational Therapy Practice Framework: Domain and Process (AJOT, 2014) and conceptual models most relevant for their practice focus to evaluation and intervention processes. Additionally, students redesign facility forms to reflect The OT Practice Framework's language and concepts.</p>	3
OTD750	<p>OCCUPATIONAL THERAPIST AS ENTREPRENEUR</p> <p>This course provides the professional student with the knowledge and skills necessary to market and manage an occupational therapy practice in either traditional or emerging healthcare systems. Students develop business plans and marketing strategies and research potential financing through grants or loans. Legal and ethical issues impacting practice are also examined.</p>	3

Course Code	Course Information	Credits
OTD751	<p>CAPSTONE PROJECT DESIGN</p> <p>Students continue to develop their ability to critically evaluate scientific evidence within their practice focus. Through a critical review of the literature, the professional student generates an evidence-based plan of assessment or intervention. This is linked to the Capstone Rotation (faculty approval).</p>	3
OTD752	<p>EDUCATION THEORY AND TECHNOLOGY</p> <p>This course, through an examination of learning theories, provides the therapist with strategies to develop optimal learning experiences for their students, clients, caregivers, or employers. Coursework is applied directly in the professional student's educational and/or clinical setting. Students gain skills in current technological tools used in the teaching-learning environment.</p>	3
OTD760	<p>LEADERSHIP AND PROFESSIONALISM</p> <p>This course examines the meaning of leadership from both a personal and organizational perspective. Students explore leadership theories and styles and the meaning of professionalism through narratives of leaders and related literature. Through group discussion of leadership and professional issues, students reflect and on their own leadership strengths, as well as strategies for applying this knowledge in their professional lives.</p>	3
OTD761	<p>PROPOSAL DEVELOPMENT</p> <p>This course provides the experienced therapist with the skills and resources necessary for developing competitive proposals, including an IRB proposal, a proposal for a professional presentation, and a proposal for a professional publication. Students will explore and evaluate presentation and publication</p>	1

Course Code	Course Information	Credits
	<p>opportunities, participate in discussions to understand human subject protection, and refine their preliminary IRB proposal, created in OTD 751, to gain approval for their capstone project.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • OTD741 : Evidence-Based Practice • OTD751 : Capstone Project Design 	
OTD766	<p>METHODS OF EVALUATION</p> <p>Students learn to evaluate the effectiveness of their teaching and therapeutic interventions. Methods for survey and test construction are examined and practiced with consumers of our services: students, clients, and/or caregivers.</p>	3
OTD770	<p>CAPSTONE I: DESIGN AND IMPLEMENTATION</p> <p>The methods of evidence-based practice culminate in the professional student's design and implementation of an intervention within their practice setting.</p>	3
OTD771	<p>CAPSTONE II: EVALUATION AND PRESENTATION</p> <p>Students evaluate the efficacy of implemented programs and present their findings. Presentations are conducted on the Chatham University campus to the Master of Occupational Therapy Program's faculty, students, and area clinicians. Additionally, the professional student writes a report for professional publication or grant application.</p>	3
OTD772	<p>CAPSTONE IMPLEMENTATION AND EVALUATION</p> <p>The methods of evidence-based practice culminate in the professional student's design and implementation of an intervention within their clinical setting. Although an independent study, students network with faculty mentors, administrators, and other professionals to successfully engage in the evidence-based occupational therapy capstone project. Professional</p>	5

Course Code	Course Information	Credits
	<p>students apply concepts from previous courses as they evaluate the efficacy of their individual implemented programs and present their findings. Presentations are conducted on the Chatham University campus to the Master of occupational therapy Program's faculty, students, and area practitioners.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • OTD741 : Evidence-Based Practice • OTD751 : Capstone Project Design • OTD761 : Proposal Development 	
OTD791	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
OTD792	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
OTH601	<p>FOUNDATIONS OF OCCUPATION & OCCUPATIONAL THERAPY</p> <p>Students explore the role of occupation as the foundation of the profession and the relationship between occupation and health. Standards of practice, OT roles, history, current practice, and future trends are discussed. Methods of evaluation and documentation are introduced and practiced. Occupations throughout the lifespan and implications for intervention are examined.</p>	3
OTH603	<p>INTRO TO OT ASSESSMENT & INTERVENTION SKILLS</p>	4

Course Code	Course Information	Credits
OTH605	<p>Students learn to identify and assess the influence of client factors, performance skills and patterns, activity demands, and context on occupational performance from a physical disabilities perspective. Experiential learning opportunities enable students to gain proficiency in administering and interpreting assessments and practicing intervention strategies related to multiple areas of occupation.</p> <p>Students learn and apply the occupational therapy process for clients with mental health disorders. Occupational performance assessment, and intervention planning and implementation are emphasized. Societal and personal attitudes towards persons with mental health disorders will be explored. The social, economic, political, and demographic factors influencing mental health service provision will be addressed.</p>	4
OTH610	<p>This course expands the OT student's understanding and application of treatment skills and clinical reasoning. The students practice these skills to enhance technical abilities and gain confidence in the selection and use of procedures. Objectives are achieved through visiting lecturers, case studies, class discussion, active participation, and dialogue.</p>	2
OTH612	<p>This course introduces the role of evidence in occupational therapy clinical reasoning and practice. Students develop research consumer skills, including database search techniques, and critical analysis skills. Students are instructed within lecture and lab formats and with written and oral assignments that develop understanding of evidence based practice.</p>	2

Course Code	Course Information	Credits
OTH622	<p>OCCUPATIONAL PERFORMANCE IN CHILDREN & ADOLESCENTS</p> <p>Students explore occupational development of children and adolescents, and the interrelationship between the child, occupation, and the environment on participation. Students learn about common pediatric diagnoses, practice models, and intervention sites, and apply this knowledge to occupational therapy evaluation and intervention. Influence of the family, environment, and socio-cultural factors is explored.</p>	4
OTH623	<p>OCCUPATIONAL PERFORMANCE IN THE AGING POPULATION</p> <p>This course examines the normal aging process with emphasis on occupational performance, activity limitation, and participation restrictions of individuals from adulthood through the life span. Students review the assessment and treatment of clients, including prevention, remediation, and maintenance of wellness. Various practice areas for the adult and aging populations are discussed.</p>	4
OTH624	<p>BIOMECHANICS & OCCUPATIONAL PERFORMANCE</p> <p>Students integrate knowledge of occupational performance with anatomy, neurology, and body factors to learn how impairments can lead to disability or role loss. Assessments and interventions are taught with a holistic approach to the person. Instruction is in both lecture and lab formats, and with written and oral assignments.</p>	4
OTH626	<p>OCCUPATIONAL THERAPY MODELS OF PRACTICE</p> <p>Theoretical practice models that guide occupational therapy evaluation and intervention are introduced and explored. Engagement in active learning opportunities enables students to describe and implement the occupation therapy process using selected models. Students analyze and relate pertinent</p>	2

Course Code	Course Information	Credits
	occupations therapy literature and case studies to models of practice.	
OTH628	EVIDENCE-BASED PRACTICE II	3
	This course develops and applies the students' evidence based practice skills. Emphasis is placed on writing focused clinical questions, systematic database searches and critical appraisals of research papers. Students work in small groups with a faculty advisor and individually to analyze and articulate evidence through written and oral assignments.	
OTH632	ENVIRONMENTAL INTERVENTIONS	3
	Students learn principles of assistive technology practice and the occupational therapist's role on the assistive technology team. Students explore and critique technology resources, assess environments, and apply information to evaluation and treatment. The impact of environmental interventions on the consumer's ability to engage in meaningful occupations is discussed and analyzed.	
OTH633	GLOBAL HEALTH PERSPECTIVES: A FIELD EXPERIENCE	2
	This course is intended to provide an opportunity for occupational therapy students to study and experience global health issues by participating in an international fieldwork experience. Not everything that is germane to understanding global health can be covered in a single elective course; this experience is intended to give students the opportunity to 1) understand the culture and contemporary health care issues of the visiting country 2) illustrate the role or potential role of occupational therapy in contributing to the health and wellbeing of the population and 3) reflect on their personal growth and on the sustainability of their service.	

Course Code	Course Information	Credits
OTH635	<p>PEDIATRIC FIELDWORK I-A & SEMINAR</p> <p>This course provides students the opportunity to observe and engage with practitioners who provide occupational therapy services to infants, children and/or adolescents. This course uses guided assignments and small group discussions to bridge didactic classroom knowledge with the occupational therapy process and practices observed in pediatric settings.</p>	1
OTH636	<p>ADULT FIELDWORK I-B & SEMINAR</p> <p>This course provides students the opportunity to observe and engage with practitioners who provide occupational therapy services in adult/geriatric settings. Guided assignments and small group discussions are used to bridge didactic classroom knowledge with the occupational therapy process and practices observed in adult/geriatric settings.</p>	1
OTH637	<p>FUNCTIONAL NEUROSCIENCE</p> <p>This course applies content presented concurrently in BIO509 to the occupational therapy process. Students broaden their understanding of neurological disorders that may affect an individual's ability to perform routine occupational tasks. Students begin to translate the physiological changes incurred secondary to these neurological diagnoses to develop assessment and intervention plans.</p>	4
OTH641	<p>NEUROLOGICAL CONDITIONS & OCCUPATIONAL PERFORMANCE</p> <p>This course emphasizes preparatory, purposeful, and occupation-based interventions as well as exploration of current innovations commonly used in occupational therapy practice. Students learn, apply, practice, compare and contrast evaluative and intervention methods for dysfunction related to neurological conditions. Students practice hands-on techniques, analyze cases, and superimpose purposeful and occupation-</p>	4

Course Code	Course Information	Credits
	based treatment after incorporating various neuro-physiologically based techniques.	
OTH643	<p>EVIDENCE-BASED PRACTICE III</p> <p>This course further develops evidence based practice skills by synthesizing the evidence analyzed in OTH 628 to prepare for writing a critical appraisal of topic. Students continue to work in small groups with a faculty advisor and produce a large format poster to report their findings via a poster presentation.</p>	2
OTH644	<p>COMMUNITY BASED FIELDWORK I-C & SEMINAR</p> <p>This community-based fieldwork experience emphasizes higher level management and leadership skills, including program development, advocacy and consultation. Students learn about community agencies, population and organizational needs, and the role of occupational therapy practitioners in community based settings. Students complete an organizational analysis, needs assessment, and a program plan which is implemented and evaluated.</p>	2
OTH645	<p>PROFESSIONAL LEADERSHIP & MANAGEMENT</p> <p>Students explore the meaning of professional leadership/service through self-assessment and engagement in a variety of projects throughout the course. Managerial roles, including communicating, marketing, budgeting, planning and evaluating programs are discussed within the broader context of an evolving health care system. Ethical issues related to occupational therapy are explored and analyzed.</p>	3
OTH646	<p>EVIDENCE-BASED PRACTICE IV</p> <p>In this course, students prepare a critical appraisal of topic using evidence gathered and analyzed in OTH612, OTH628, and OTH643. Students develop a scholarly agenda and learn how to collect and analyze data in preparation for entry level</p>	3

Course Code	Course Information	Credits
	based practice. Objectives are achieved through written and oral assignments.	
OTH660	FIELDWORK II SEMINAR This course provides students with resources and skills that will facilitate their success during Level II fieldwork. In addition, job search skills, resume writing, and interviewing techniques are integrated. Students become familiar with fieldwork II evaluation methods as well as the application requirements and processes for the certification examination and state licensure.	1
OTH662	FIELDWORK LEVEL II-A This 12-week, full time experience takes place in practice settings that provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.	12
OTH665	FIELDWORK LEVEL II-B This 12-week, full time experience takes place in practice settings that provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.	12
OTH665I	FIELDWORK LEVEL II B PART ONE This Full time experience takes place in practice settings that	4

Course Code	Course Information	Credits
OTH665II	<p>provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.</p> <p>This full time experience takes place in practice settings that provides occupational therapy services to individuals in order to enhance occupational performance. Students develop entry-level skills in evaluation, intervention planning and implementation, documentation, problem solving, and professionalism in facilities using a variety of service delivery models reflective of current occupational therapy practice.</p>	8
OTH690	<p>INTRODUCTION TO EVIDENCE-BASED PRACTICE FOR OCCUPATIONAL THERAPISTS</p> <p>Students acquire evidence based practice literature skills by learning to search data bases for peer reviewed occupational therapy literature and appraising the evidence in terms of a focused research question. Students acquire knowledge of principles needed to critically read peer reviewed evidence through instructor demonstration of evidence appraisal, online group discussions/critiques of research articles, and writing assignments that require the student to summarize and paraphrase salient information in professional language.</p>	3
OTH695	<p>MODELS OF PRACTICE IN OCCUPATIONAL THERAPY</p> <p>This course presents occupation based models that guide the practice of occupational therapy. Students will analyze and compare selected models via assigned readings and group discussions. Students will become familiar with elements and characteristics, assessment tools and techniques, treatment planning and intervention strategies, and documentation</p>	3

Course Code	Course Information	Credits
	formats associated with the models presented, and apply selected models to their professional practice.	
OTH707	<p>INTRODUCTION TO DOCTORAL CAPSTONE</p> <p>This course introduces students to the doctoral capstone. Students prepare individual professional development plans and explore options for their individual capstone experience and capstone project. Through a series of guided assignments, students identify personal and professional strengths and develop an initial plan and learning objectives for the capstone experience.</p>	2
OTH738	<p>DOCTORAL CAPSTONE PROJECT DEVELOPMENT I</p> <p>In this course, students will prepare for the doctoral experiential project by searching, evaluating, and synthesizing the literature related to their proposed topic. This literature review will provide students with a foundation and rationale for the design on their proposed project.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • OTH707 : Introduction to Doctoral Capstone 	2
OTH748	<p>DOCTORAL CAPSTONE PROJECT DEVELOPMENT II</p> <p>In this course, students will continue to prepare for the doctoral project. Focus will be on development of project objectives, project design and methods of evaluation based on current best evidence.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • OTH738 : Doctoral Capstone Project Development I 	3
OTH767	<p>INTEGRATED OCCUPATIONAL SCIENCE</p> <p>Students explore occupational science to promote in-depth understanding of occupation as scientifically based and integral</p>	3

Course Code	Course Information	Credits
OTH778	<p>to the philosophical base for occupational therapy. Through readings, discussions, and experience, students develop a personal and professional philosophy of occupation and analyze opportunities for development of occupational therapy in social, cultural, political, economic, and ecological contexts.</p> <p>OUTCOME METHODS AND MEASURES</p> <p>Students will explore outcome methods as applied to various contexts, purposes, and methodologies. More specific exploration of outcomes related to individual doctoral projects will include the selection of appropriate outcome measure(s), development of procedural and process skills, and development of a plan for applying the selected measure to the doctoral project.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• OTH646 : Evidence-Based Practice Capstone Project 	3
OTH780	<p>EDUCATION THEORY AND INSTRUCTIONAL DESIGN</p> <p>Students will examine learning theories and apply principles of instructional design to develop educational objectives and learning experiences for clients, practitioners, students, and stakeholders. Students gain skills in technology used in the teaching-learning environment. Coursework is applied directly to the student's proposed doctoral experience.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> <li>• OTH662 : Fieldwork Level II-A <li>• OTH665I : Fieldwork Level II B Part One <li>• OTH665II : Fieldwork Level II B Part Two 	3
OTH790	<p>DOCTORAL CAPSTONE</p> <p>The Doctoral Capstone provides in-depth exposure in one or more of the following: clinical practice, research, leadership, program and policy development, advocacy, education, or</p>	12

Course Code	Course Information	Credits
	<p>theory development. The Doctoral Capstone includes the Capstone Experience and Capstone Project. Students work with a Site Mentor, Faculty Mentor, and Capstone Coordinator throughout the process.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • OTH748 : Doctoral Capstone Project Development II 	
OTH795	<p>DOCTORAL DISSEMINATION</p> <p>In this course, students disseminate the findings from their doctoral capstone project. Students present the outcomes of their project in a professional forum. The plan for dissemination and evaluation of student performance is developed in collaboration with the student, the doctoral capstone coordinator, the faculty mentor, and the site mentor.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • OTH748 : Doctoral Capstone Project Development II 	3
OTH800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
PAS600	<p>ESSENTIALS FOR THE PHYSICIAN ASSISTANT I</p> <p>Essentials for the Physician Assistant I is a problem-oriented approach to primary and specialty care medicine. This course incorporates medical diagnosis and treatment; pharmacotherapeutics; psychosocial assessment and management; patient education; management of patients with chronic illness; clinical decision making; and prevention of disability and disease through detection, education, and prevention. The course is divided into three segments, Units 1, 2, and 3.</p>	9
PAS601	<p>ESSENTIALS FOR THE PHYSICIAN ASSISTANT II</p>	9

Course Code	Course Information	Credits
	<p>Essentials for the Physician Assistant II is a problem-oriented approach to primary and specialty care medicine. This course incorporates medical diagnosis and treatment; pharmacotherapeutics; psychosocial assessment and management; patient education; management of patients with chronic illness; clinical decision making; and prevention of disability and disease through detection, education, and prevention.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PAS600 : Essentials for the Physician Assistant I 	
PAS602	<p>CLINICAL APPLICATION OF BASIC SCIENCES I</p> <p>An in-depth study of topics in gross human anatomy, physiology, and pathophysiology, supporting the instruction in the Essentials for the Physician Assistant courses. Instruction will involve basic sciences with an emphasis on the clinical application of the material, utilizing a systems approach.</p>	4
PAS603	<p>CLINICAL APPLICATION OF BASIC SCIENCES II</p> <p>This course is a continuation of PAS 602. An in-depth study of topics in gross human anatomy, physiology, and pathophysiology, supporting the instruction in the Essentials for the Physician Assistant courses. Instruction will involve basic sciences with an emphasis on the clinical application of the material, utilizing a systems approach.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PAS602 : Clinical Application of Basic Sciences I 	4
PAS604	<p>CRITICAL READING OF THE LITERATURE I</p> <p>Students critically evaluate medical literature and resources used in the Essentials for the Physician Assistant courses, including research design, data collection, and statistical analysis.</p>	1

Course Code	Course Information	Credits
PAS605	CRITICAL READING OF THE LITERATURE II This course is a continuation of PAS 604. Students critically evaluate medical literature and resources used in the Essentials for the Physician Assistant courses, including research design, data collection, and statistical analysis.	1
PAS606	CLINICAL PHARMACOLOGY I This clinically oriented course provides students with knowledge required for the safe and effective use of pharmaceutical agents in the diagnosis, prevention, and treatment of diseases through an understanding of pharmacokinetics and pharmacodynamics. Topics selected will support the body systems covered in the Essentials for the Physician Assistant courses.	2
PAS607	CLINICAL PHARMACOLOGY II This course is a continuation of PAS 606. This clinically oriented course provides students with knowledge required for the safe and effective use of pharmaceutical agents in the diagnosis, prevention, and treatment of diseases through an understanding of pharmacokinetics and pharmacodynamics. Topics selected will support the body systems covered in the Essentials for the Physician Assistant courses. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • PAS606 : Clinical Pharmacology I 	2
PAS610	INTRODUCTION TO CLINICAL EXPERIENCE I This course will introduce the student to various types of medical documentation and medical terminology. It will address HIPAA and OSHA regulations, as well as Universal Precautions. Professional comportment while on rotations will also be introduced.	2

Course Code	Course Information	Credits
PAS611	<p>INTRODUCTION TO CLINICAL EXPERIENCE II</p> <p>This is a continuation of PAS 610. Students will continue to explore various types of medical documentation, and issues surrounding cultural sensitivity in medicine. Professional comportment and communication skills will be addressed. Students will be introduced to billing and coding. Policies and procedures for clinical rotations will also be introduced.</p>	2
PAS612	<p>INTRODUCTION TO THE PA PROFESSION</p> <p>This course introduces the students to the physician assistant profession and their role in the American healthcare system. Topics of discussion include history of the profession, national and state organizations, federal and state laws affecting practice, education, and the future of the profession.</p>	1
PAS614	<p>MEDICAL ETHICS</p> <p>Contemporary professional medical ethics issues are discussed and debated. Instruction is provided through classroom discussions, guest lectures, and small group discussions/presentations.</p>	1
PAS617	<p>CLINICAL PROCEDURES</p> <p>Laboratory course covering theory and application of common clinical procedures that a physician assistant will encounter during practice. Students demonstrate competence through practical evaluations.</p>	2
PAS625	<p>CLINICAL DECISION MAKING I</p> <p>Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.</p>	1

Course Code	Course Information	Credits
PAS626	<p>CLINICAL DECISION MAKING II</p> <p>Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.</p>	1
PAS627I	<p>CLINICAL DECISION MAKING III PART ONE</p> <p>Problem-oriented cases present the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. These courses run concurrently with the clinical experiences I-IX.</p>	1
PAS627II	<p>CLINICAL DECISION MAKING III PART TWO</p> <p>Genetic based case presents the student with opportunities to use clinical reasoning to formulate differential diagnoses and emphasize development of treatment and care plans. Introduction to MAT (Medication Assisted Treatment) is also covered.</p>	1
PAS628	<p>CLINICAL DECISION MAKING IV</p> <p>Drawing on skills acquired in PAS 625, 626 & 627, as well as knowledge that has been acquired throughout the curriculum, students develop case presentations which include history, physical examination, diagnostics, treatment, and patient education, based on specific disease entities. Additionally, students complete summative program evaluations related to medical knowledge base and clinical assessment skills.</p>	1
PAS630	<p>TOPICS IN CLINICAL MEDICINE</p> <p>An intensive review in preparation for entering practice as a physician assistant. A series of special seminars and presentations that provides the student with a topical approach</p>	3

Course Code	Course Information	Credits
	to medicine.	
PAS635	<p>HEALTHCARE POLICY</p> <p>Students explore relevant health-care law and policy issues that impact the Physician Assistant profession and health-care delivery systems. Instruction is provided through classroom discussions, guest lectures, and small group problem-based learning.</p>	1
PAS636	<p>PROGRAM TO PRACTICE</p> <p>This course assists students with the transition of becoming a clinically practicing physician assistant. The course will provide information on how to prepare for the new career, including obtaining certification, licensure, malpractice insurance, and other essential items needed before they begin practicing.</p>	1
PAS637	<p>CLINICAL SKILLS FOR THE PHYSICIAN ASSISTANT I</p> <p>This skills-based course will cover history, physical examination, documentation of patient data and diagnostic aspects of the head and neck, integumentary, lymphatic, musculoskeletal, pulmonary and cardiac systems. History taking will also be introduced. Course format will include lectures, demonstrations, online simulation modules, and high-fidelity simulation.</p>	4
PAS638	<p>CLINICAL SKILLS FOR THE PHYSICIAN ASSISTANT II</p> <p>This skills-based course will cover history, physical examination, and documentation of patient data and diagnostic aspects of the abdominal, genitourinary, and neurologic examinations. The comprehensive patient examination will also be covered. Course format will include lectures, demonstrations, online simulation modules, and high-fidelity simulation.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	4

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> PAS637 : Clinical Skills for the Physician Assistant I 	
PAS640	<p>CLINICAL EXPERIENCE I</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS641	<p>CLINICAL EXPERIENCE II</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS642	<p>CLINICAL EXPERIENCE III</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS643	<p>CLINICAL EXPERIENCE IV</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS644	<p>CLINICAL EXPERIENCE V</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3

Course Code	Course Information	Credits
PAS645	<p>CLINICAL EXPERIENCE VI</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS646	<p>CLINICAL EXPERIENCE VII</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS647	<p>CLINICAL EXPERIENCE VIII</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS648	<p>CLINICAL EXPERIENCE IX</p> <p>These are clinical courses designed to provide students with supervised medical and surgical clinical practice experiences enabling them to meet program expectations and acquire the competencies needed for clinical PA practice.</p>	3
PAS800	<p>CONTINUING GRADUATE CREDIT</p> <p>Continuing Graduate Credit</p>	1
PED100	<p>SPECIAL TOPICS</p> <p>PED special topics courses offer students a variety of exercise opportunities by incorporating the latest trends in the fitness field.</p>	1

Course Code	Course Information	Credits
PED102	<p>VARSITY SPORTS LEVEL I</p> <p>Members of Chatham's NCAA Division III varsity sports teams may register for credit two times, either for the same varsity sport or two different varsity sports, over the course of the student's participation in varsity sport. Injured team members may receive a pass for the course if they continue to participate through regular rehabilitation, managerial duties, regular attendance at team practices, and support of the team. Team members who quit, are dismissed or are otherwise declared ineligible must withdraw from the course. Failure to withdraw results in a failing grade. The course is graded pass/fail only.</p>	1
PED103	<p>WEIGHT TRAINING FOR WOMEN LEVEL I</p> <p>This class focuses on muscular toning and strengthening through the use of weight training equipment. Class discussions on muscle physiology supplement vigorous workouts using Body Masters equipment and free weights. Students may repeat this course a maximum of two times.</p>	1
PED106	<p>FLAG FOOTBALL LEVEL I</p> <p>Flag Football Level I</p>	1
PED107	<p>BODY DYNAMICS LEVEL I</p> <p>This is an exercise program that incorporates basic dance warm-up, back exercise, stretching, deep breathing, and relaxation exercises. Body Dynamics is created from many physical and mental disciplines and is not an aerobics program.</p>	1
PED108	<p>YOGA AND RELAXATION LEVEL I</p> <p>Yoga is the world's oldest system of personal development. It is a discipline that can help bring stress under control through the practice of physical postures (asanas) for muscle tone and</p>	1

Course Code	Course Information	Credits
	flexibility and through breathing and meditation techniques for quieting the mind.	
PED113	<p>HIP HOP DANCE LEVEL I</p> <p>This high-impact class is structured to expose students to the world of commercial dance within the hip hop genre. Class begins with a traditional dancer warm-up, followed by combination-based learning, and will end with a cool down. A previous dance background is strongly encouraged, but not required for this fun, energetic class room environment.</p>	1
PED114	<p>CONTEMPORARY DANCE LEVEL I</p> <p>This class is structured to expose students to the genre of contemporary dance. Students will be introduced to moving within a larger plane of movement, isolations, and unconventional movement patterns. This class is physically challenging and while previous dance experience is encouraged, all levels are welcome.</p>	1
PED115	<p>SQUASH LEVEL I</p> <p>Students will learn the fundamentals of squash, including sound footwork, proper racquet technique, and various serves. Basic strategy, squash rules, and terminology are presented to give the student a complete understanding of the game.</p>	1
PED123	<p>INDOOR SOCCER LEVEL I</p> <p>Students will learn the proper techniques used in the game of soccer including passing, shooting, heading, positioning, and game strategies. Physical conditioning will also be a part of the course.</p>	1
PED124	<p>BEGINNING BOXING LEVEL I</p>	1

Course Code	Course Information	Credits
PED126	<p>Beginning Boxing is a safe, fun, fast paced, non-competitive sports class that uses actual boxing equipment to teach pugilistic skills. While not an aerobics class, students will improve their cardio levels, hand eye coordination, and body strength, while learning punches, practicing defense, grasping boxing movements and sparring lightly.</p> <p>Oriental Sword is a fun, fast paced, non competitive fitness class that uses traditional Japanese sword and staff techniques to get a great full body workout. The course uses wooden or plastic swords in a manner consistent with ancient Japanese swordsmanship, manners and discipline.</p>	1
PED127	<p>LATIN DANCE EXTRAVAGANZA LEVEL I</p> <p>Come bailando (dancing) and learn Rumba, Cha-cha, and Salsa! This course starts with fun and easy basics and variations in these similar dances, then moves into more advanced patterns as the semester progresses. Leading and following technique are also taught to enable students to dance with anyone.</p>	1
PED141	<p>WALKING FOR FITNESS LEVEL I</p> <p>This course covers all aspects of walking, including equipment and training techniques. In addition, students will learn basic body dynamics and how they relate to this lifetime training activity.</p>	1
PED145	<p>AEROBIC DANCING LEVEL I</p> <p>This course provides stimulating low-impact aerobic exercise to improve overall fitness. Routines are choreographed to music. Emphasis is on muscle tone, correct use of exercise techniques, fat density, and nutrition.</p>	1

Course Code	Course Information	Credits
PED155	<p>SWIMMING LEVEL I</p> <p>Swimming can be an enjoyable means of maintaining fitness for a lifetime. Individual instruction is provided for beginners and experienced swimmers, who design their aquatic exercise programs. Basic stroke mechanics and common stroke defects are examined and corrected to enhance swimming proficiency.</p>	1
PED158	<p>SCUBA LEVEL I</p> <p>Designed for someone with no scuba experience. Students will learn the academics of diving, proper use of equipment, and safety concerns relating to scuba diving. Consists of classroom and pool time instruction. Additional Fee(s): There is an additional fee for this course.</p>	1
PED170	<p>WHITEWATER KAYAKING LEVEL I</p> <p>This course will introduce students to Whitewater Kayaking including paddling skills, river navigation, group dynamics, equipment and safety. Much of the 7 week course will be instructed in the campus pool. Students will be required to participate in weekend river trips. Dates will be communicated in advance by the instructor.</p>	1
PED190	<p>HEALTH AND WELLNESS STUDIES LEVEL I</p> <p>In this course, practice and study various tools that promote a healthier balance for our day-to-day life. Students will discuss and journal about mental health, mindfulness, self-care, sleep, nutrition, ayurvedic practices, positive thinking, and resiliency.</p>	1
PED202	<p>VARSITY SPORTS LEVEL II</p> <p>Members of Chatham's NCAA Division III varsity sports teams may register for credit two times, either for the same varsity sport or two different varsity sports, over the course of the</p>	1

Course Code	Course Information	Credits
	<p>student's participation in varsity sport. Injured team members may receive a pass for the course if they continue to participate through regular rehabilitation, managerial duties, regular attendance at team practices, and support of the team. Team members who quit, are dismissed or are otherwise declared ineligible must withdraw from the course. Failure to withdraw results in a failing grade. The course is graded pass/fail only.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED102 : Varsity Sports • PED102 : Varsity Sports Level I 	
PED203	<p>WEIGHT TRAINING FOR WOMEN LEVEL II</p> <p>This class focuses on muscular toning and strengthening through the use of weight training equipment. Class discussions on muscle physiology supplement vigorous workouts using Body Masters equipment and free weights.</p>	1
PED206	<p>FLAG FOOTBALL LEVEL II</p> <p>Flag Football Level II</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED106 : Flag Football • PED106 : Flag Football Level I 	1
PED207	<p>BODY DYNAMICS LEVEL II</p> <p>This is an exercise program that incorporates basic dance warm-up, back exercise, stretching, deep breathing, and relaxation exercises. Body Dynamics is created from many physical and mental disciplines and is not an aerobics program.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED107 : Body Dynamics • PED107 : Body Dynamics Level I 	1

Course Code	Course Information	Credits
PED208	YOGA AND RELAXATION LEVEL II	1
	<p>Yoga is the world's oldest system of personal development. It is a discipline that can help bring stress under control through the practice of physical postures (asanas) for muscle tone and flexibility and through breathing and meditation techniques for quieting the mind.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED108 : Yoga and Relaxation • PED108 : Yoga and Relaxation Level I 	
PED213	HIP HOP DANCE LEVEL II	1
	<p>This high-impact class is structured to expose students to the world of commercial dance within the hip hop genre. Class begins with a traditional dancer warm-up, followed by combination-based learning, and will end with a cool down. A previous dance background is strongly encouraged, but not required for this fun, energetic class room environment.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED113 : Hip Hop Dance Level I • PED113 : Hip Hop Dance 	
PED214	CONTEMPORARY DANCE LEVEL II	1
	<p>This class is structured to expose students to the genre of contemporary dance. Students will be introduced to moving within a larger plane of movement, isolations, and unconventional movement patterns. This class is physically challenging and while previous dance experience is encouraged, all levels are welcome.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED114 : Contemporary Dance Level I • PED114 : Contemporary Dance 	

Course Code	Course Information	Credits
PED215	<p>SQUASH LEVEL II</p> <p>Students will learn the fundamentals of squash, including sound footwork, proper racquet technique, and various serves. Basic strategy, squash rules, and terminology are presented to give the student a complete understanding of the game.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• PED115 : Squash <li>• PED115 : Squash Level I 	1
PED223	<p>INDOOR SOCCER LEVEL II</p> <p>Students will learn the proper techniques used in the game of soccer including passing, shooting, heading, positioning, and game strategies. Physical conditioning will also be a part of the course.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• PED123 : Indoor Soccer <li>• PED123 : Indoor Soccer Level I 	1
PED224	<p>BEGINNING BOXING LEVEL II</p> <p>Beginning Boxing is a safe, fun, fast paced, non-competitive sports class that uses actual boxing equipment to teach pugilistic skills. While not an aerobics class, students will improve their cardio levels, hand eye coordination, and body strength, while learning punches, practicing defense, grasping boxing movements and sparring lightly.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• PED124 : Beginning Boxing Level I <li>• PED124 : Beginning Boxing 	1
PED226	<p>ORIENTAL SWORD LEVEL II</p> <p>Oriental Sword is a fun, fast paced, non competitive fitness</p>	1

Course Code	Course Information	Credits
	<p>class that uses traditional Japanese sword and staff techniques to get a great full body workout. The course uses wooden or plastic swords in a manner consistent with ancient Japanese swordsmanship, manners and discipline.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED126 : Oriental Sword • PED126 : Oriental Sword Level I 	
PED227	<p>LATIN DANCE EXTRAVAGANZA LEVEL II</p> <p>Come bailando (dancing) and learn Rumba, Cha-cha, and Salsa! This course starts with fun and easy basics and variations in these similar dances, then moves into more advanced patterns as the semester progresses. Leading and following technique are also taught to enable students to dance with anyone.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED127 : Latin Dance Extravaganza Level I • PED127 : Latin Dance Extravaganza 	1
PED241	<p>WALKING FOR FITNESS LEVEL II</p> <p>This course covers all aspects of walking, including equipment and training techniques. In addition, students will learn basic body dynamics and how they relate to this lifetime training activity.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED141 : Walking for Fitness • PED141 : Walking for Fitness Level I 	1
PED245	<p>AEROBIC DANCING LEVEL II</p> <p>This course provides stimulating low-impact aerobic exercise to improve overall fitness. Routines are choreographed to music. Emphasis is on muscle tone, correct use of exercise</p>	1

Course Code	Course Information	Credits
	<p>techniques, fat density, and nutrition.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED145 : Aerobic Dancing • PED145 : Aerobic Dancing Level I 	
PED255	<p>SWIMMING LEVEL II</p> <p>Swimming can be an enjoyable means of maintaining fitness for a lifetime. Individual instruction is provided for beginners and experienced swimmers, who design their aquatic exercise programs. Basic stroke mechanics and common stroke defects are examined and corrected to enhance swimming proficiency.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED155 : Swimming • PED155 : Swimming Level I 	1
PED258	<p>SCUBA LEVEL II</p> <p>Designed for someone with no scuba experience. Students will learn the academics of diving, proper use of equipment, and safety concerns relating to scuba diving. Consists of classroom and pool time instruction. Additional Fee(s): There is an additional fee for this course.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED158 : Scuba • PED158 : Scuba Level I 	1
PED270	<p>WHITEWATER KAYAKING LEVEL II</p> <p>This course will introduce students to Whitewater Kayaking including paddling skills, river navigation, group dynamics, equipment and safety. Much of the 7 week course will be instructed in the campus pool. Students will be required to participate in weekend river trips. Dates will be communicated in advance by the instructor.</p>	1

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED170 : Whitewater Kayaking Level I • PED170 : Whitewater Kayaking 	
PED290	<p>HEALTH AND WELLNESS STUDIES LEVEL II</p> <p>In this course, practice and study various tools that promote a healthier balance for our day-to-day life. Students will discuss and journal about mental health, mindfulness, self-care, sleep, nutrition, ayurvedic practices, positive thinking, and resiliency.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PED190 : Health and Wellness Studies • PED190 : Health and Wellness Studies Level I 	1
PED491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
PED492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
PHI113	<p>INTRODUCTION TO PHILOSOPHY</p> <p>An introductory course focusing on some of the perennial problems of philosophy: the relation of mind and body; the nature of knowledge, freedom and determinism; the existence of God; immortality, and moral responsibility.</p>	3
PHI121	<p>INTRODUCTION TO LOGIC</p>	3

Course Code	Course Information	Credits
PHI210	<p>An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.</p> <p>This course is concerned with the ethical issues arising from recent biomedical innovations or issues that might arise from future innovations. Among the topics discussed are new definitions of death and personhood, killing versus letting die, allocation of scarce medical resources, organ transplants, genetic engineering, the psychiatric control of human behavior, and new projected techniques of human sexual and asexual reproduction.</p>	3
PHI213	SPECIAL TOPICS	3
PHI218	<p>ETHICS AND WOMEN'S ISSUES</p> <p>A discussion-based course that focuses upon issues of particular relevance to women. Topics discussed may include equality, affirmative action and comparative worth, social and gender roles, feminism, love, sexuality, family, work, caring and justice, pornography, fashion and beauty, abortion, reproduction, and ecofeminism.</p>	3
PHI225	<p>ENVIRONMENTAL ETHICS</p> <p>An investigation of some of the important moral issues generated by human interaction with the environment (natural entities, ecosystems, and other species), such as obligation to future generations, the theoretical foundations for an adequate environmental ethic, biodiversity preservation, environmentally sound development and cultural practices, responsibility to animals, and personal choices and lifestyles. Cross-listed as ENV 225.</p>	3

Course Code	Course Information	Credits
PHI241	<p>LOVE, SEX, AND FRIENDSHIP</p> <p>This course is an intensive philosophical inquiry into the concepts of love, friendship, and sex and how these are connected. It examines ideas on relationship, intimacy, and personal fulfillment by some of the best thinkers in the western intellectual tradition. It also explores some puzzling contemporary problems surrounding relationships.</p>	3
PHI300	<p>WOMANIST AND LIBERATION THEOLOGY</p> <p>Womanist theology is a liberation theology that analyses politically oppressive structures, cultural habits, and race and gender constructs, and the ways these forces can shape experiences of faith. This course offers opportunities to engage and confront unjust and repressive theologies in ways that support greater inclusion and well-being.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • ENG105 : First-Year Writing 	3
PHI301	<p>BIOMEDICAL AND RESEARCH ETHICS</p> <p>This course is an intensive examination of ethical issues within the professional domains of biomedicine and human subjects research. Topics covered may include patient autonomy, confidentiality, informed consent, life and death, human subjects research, and profession-specific ethical standards.</p>	3
PHY151	<p>FUNDAMENTALS OF PHYSICS I</p> <p>Introduction to the fundamental concepts of laws and mechanics. This is the first course in an algebra-based sequence. Topics include motion, Newton's Laws, gravity, conservation of energy and momentum, collisions, circular and harmonic motion, and waves.</p>	3

Course Code	Course Information	Credits
PHY152	<p>FUNDAMENTALS OF PHYSICS II</p> <p>This is the second course in an algebra-based sequence. Topics include electricity and magnetism, circuits, sound, optics, and relativity.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PHY151 : Fundamentals of Physics I 	3
PHY155L	<p>FUNDAMENTALS OF PHYSICS LABORATORY I</p> <p>An algebra-based exploration of the experimental techniques of classical physics, with applications to mechanics.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • PHY151 : Fundamentals of Physics I 	1
PHY156L	<p>FUNDAMENTALS OF PHYSICS LABORATORY II</p> <p>An algebra-based exploration of the experimental techniques of classical physics, with applications to electricity, magnetism, sound, and optics. Three hours of laboratory per week. Co-requisite: PHY152.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • PHY152 : Fundamentals of Physics II 	1
PHY251	<p>PRINCIPLES OF PHYSICS I</p> <p>Introduction to the concepts, laws, and structure of physics. This is the first course in a calculus-based sequence that focuses on classical mechanics. Topics include vector analysis, kinematics, Newton's laws, work, conservation of energy and momentum, collisions, gravity, harmonic motion, and wave phenomena.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • MTH151 : Calculus I 	4

Course Code	Course Information	Credits
PHY252	<p>PRINCIPLES OF PHYSICS II</p> <p>Introduction to the concepts, laws, and structure of physics. The second course in a calculus-based physics sequence. Topics include thermodynamics, fluids, electricity, circuit analysis, magnetism, Maxwell's equations, properties of light, and optics. Four hours of class per week.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PHY251 : Principles of Physics I 	4
PHY255L	<p>PHYSICS LABORATORY I</p> <p>Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.</p>	1
PHY256L	<p>PHYSICS LABORATORY II</p> <p>Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.</p>	1
PHY490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3
PHY492	<p>INDEPENDENT STUDY</p>	2

Course Code	Course Information	Credits
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
PHY498	TUTORIAL: PHYSICS	4
PHY499	TUTORIAL: PHYSICS	4
POL100	<p>INTRODUCTION TO COMPARATIVE POLITICS</p> <p>Introduction to politics, policies, and political institutions outside of the United States. Includes concepts such as electoral systems, party systems, parliamentary and presidential systems, democratization, and political change in both Western and non-Western settings.</p>	3
POL101	<p>AMERICAN GOVERNMENT AND PUBLIC POLICY</p> <p>This course provides an introduction to the principles and practices of government, federalism, with special attention to the policy process, political participation and selected political issues in the United States.</p>	3
POL104	<p>INTRODUCTION TO INTERNATIONAL RELATIONS</p> <p>A survey of significant patterns and trends in 20th-century world politics, modes of conducting relations among nations, instruments for promoting national interests, and current problems of economic and political interdependence.</p>	3
POL202L	<p>PUBLIC POLICY ANALYSIS FIELD EXPERIENCE</p> <p>A community partnership provides a real-world context for students to assess an issue of public policy. Students develop and research policy alternatives, create an appropriate system</p>	2

Course Code	Course Information	Credits
	<p>for analyzing and evaluating alternatives, make a recommendation for action, and present their findings to a decision-making body.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • POL202W : Understanding Public Policy 	
POL202W	<p>UNDERSTANDING PUBLIC POLICY</p> <p>This course introduces students to the concepts and tools used in the analysis of public policies, and uses these concepts and tools to examine public policies in the United States and other industrial democracies.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • GOV101 : American Government and Public Policy • POL101 : American Government and Public Policy 	3
POL207	<p>INTERNSHIP PREP - SOCIAL SCIENCES</p> <p>This course helps students succeed in a variety of professional environments in the social sciences. It serves as preparation for internships as well as permanent full-time employment. Students identify important professional and interpersonal skills, identify internship opportunities, consider strategies to secure an internship, and develop their list of learning outcomes.</p>	1
POL213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
POL217	<p>EUROPEAN IDENTITIES</p> <p>This course explores general theories of identity formation and applies them to European, national and regional levels. This course also serves as an introduction to the history and structure of the European Union and policies the EU has in place that affect identity formation.</p>	3

Course Code	Course Information	Credits
POL229	<p>CAMPAIGNS AND ELECTIONS</p> <p>What makes a candidate successful? How do you win in local, state, and national politics today? This course will provide a survey of trends in modern U.S. political campaigns and elections, including the effects of political parties, interest groups, the media, campaign finance, election laws, and individual candidates. Special emphasis will be placed on the impact of gender on electoral success. Students will follow one current campaign in detail, comparing it to the literature on campaigning.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	3
POL230	<p>CIVIC ENGAGEMENT</p> <p>This course is designed to introduce students to the dynamics and importance of mass civic engagement to the political process. Students will gain an understanding of factors affecting both voting and non-voting forms of political participation and why both are vital to the health of a democracy and democratizing countries.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	3
POL234	<p>NON-PROFITS AND POLICY ACTIVISM</p> <p>This course will provide a basic foundation for understanding how the non-profit sector functions, exploring NGO's relationships with both the public and private sector, and examining the advocacy work organizations conduct. Students will work directly with organizations to learn about policy needs and some of the tools used by non-profits.</p>	3

Course Code	Course Information	Credits
POL246	STATE AND LOCAL GOVERNMENT	3
	<p>This course offers an introduction to politics at the state and local levels. Reviews the roles of political institutions, including legislature, executives, and courts, as well as the importance of political parties and interest groups. Examines how institutional structures affect public policy outcomes, particularly in the areas of social and economic policy.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	
POL262	WOMEN AND POLITICS	3
	<p>Does gender make a difference in politics? Are women different from men in their political behavior? Do women contribute different norms, rules, and outcomes within political institutions? Students become familiar with the literature on, and conduct research projects in a specific aspect of, women's involvement in politics.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	
POL268	ENVIRONMENTAL POLICY	3
	<p>This course takes an interdisciplinary approach to the study of the theory and practice of environmental policies. The course focuses on the political and economic factors contributing to the success and failure of present environmental policies. Topics include the roles of government and the market in causing environmental problems, analysis of proposed means for resolving those problems, and the application of economic and political analyses to selected environmental issues.</p>	
POL270	SPECIAL TOPICS: APPLIED POLITICS AND POLICY	1
	<p>This course is intended to augment the political science</p>	

Course Code	Course Information	Credits
POL300	<p>curriculum by providing seminar experiences that connect co-curricular activities (e.g., workshops, internships, PLEN conferences) to political science and policy studies. Credit is earned for participation in experiential learning activities, such as the PLEN conferences, and completion of related disciplinary course work as defined by the instructor.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
POL302	<p>This course examines the functions, rules, customs, and procedures of the US Congress. Topics include the relationship between the legislative branch and other governmental institutions, including the relationship between Congress, the electorate, and interest groups. Students will also explore the committee system and the leadership structure. Prerequisite(s): POL101 or permission of the instructor.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • POL104 : Introduction to International Relations 	
POL303	<p>CONSTITUTIONAL LAW I: US GOVT POWERS/RELATIONSHIPS</p> <p>This course examines the political science of law and courts through a consideration of the scope of Article III jurisdiction, bargaining and decision-making on the U.S. Supreme Court, and political struggles over doctrine within the judicial hierarchy. Topics include the ways in which courts have affected Congressional power over taxation and commerce and presidential domestic and international powers.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy 	3
POL311W	<p>SELECTED TOPICS IN SOCIAL SCIENCE RESEARCH</p> <p>The course introduces methods and approaches used to describe, explain, and evaluate social science research. Students will get an introduction to an instructor chosen research topic. Students will learn to formulate questions, create a literature review, gather and evaluate evidence and provide feedback on outside research concerning the selected course topic.</p>	3
POL313	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
POL319	<p>POLITICS OF THE EUROPEAN UNION</p> <p>This course is designed to introduce students to the political, economic and social transformation of the European Union. Students will gain an understanding of the historical evolution of the EU, the institutional design of the EU, the major policy areas governed by the EU and major issues facing the expansion of EU in the near future.</p>	3

Course Code	Course Information	Credits
POL320	<p>POLITICS OF THE FORMER SOVIET UNION</p> <p>This course is designed to introduce students to the political, economic and social transformation of Russia and the other states of the Former Soviet Union. Students will gain an understanding of the institutional design of these countries, the manner in which political transition has developed in the region and major issues facing the region in the near future.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• POL100 : Introduction to Comparative Politics 	3
POL324	<p>U.S. FOREIGN POLICY</p> <p>This course examines the diverse factors that influence the formulation and implementation of American foreign policy. This entails the study of three components: the composition of governmental institutions involved in the policy-making process; the societal forces affecting foreign policy; and the changes in the global environment, which present new challenges to the foreign policy process. To this end, the course examines several issues, including the dominant patterns of continuity and change in foreign policy, the ability of the president to govern in foreign affairs, and the tension inherent between the needs of democracy and national security concerns.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• POL104 : Introduction to International Relations 	3
POL340	<p>POLITICAL PSYCHOLOGY</p> <p>Political psychology examines how psychological processes, concepts, and theories help to shape politics and the understanding of politics. Major topics in this course include cognition and information processing, social identity, attitudes and opinions, personality, prejudice, stereotyping, conflict, nationalism, emotion, and political behavior.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy • PSY101 : General Psychology 	
POL490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • POL311 : Selected Topics in Social Science Research • POL311W : Selected Topics in Social Science Research 	3
POL491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
POL493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
POL498	<p>TUTORIAL: POLITICAL SCIENCE</p>	4

Course Code	Course Information	Credits
POL499	TUTORIAL: POLITICAL SCIENCE	4
PSY101	<p>GENERAL PSYCHOLOGY</p> <p>An introduction to the scientific study of behavior with an emphasis on the origins of behavior, learning, social influences, physiological factors, individual differences, personality, and adjustment and maladjustment.</p>	3
PSY152	<p>HUMAN GROWTH AND DEVELOPMENT</p> <p>Physical, cognitive, social, and emotional development are studied throughout the life span. Major theories of development are discussed. Applications and examples are presented from applied contexts. Special needs of individuals at various stages throughout the life span are addressed. This course is NOT a substitute for 200 and 300 level development courses that apply toward majors in psychology and social work and certification in education. Does not count towards the psych major.</p>	3
PSY206	<p>INFANT MENTAL HEALTH</p> <p>Infant Mental Health</p>	3
PSY210	<p>PSYCHOLOGY OF EATING</p> <p>This course examines the research and theories of food consumption from biological, cultural, and learning perspectives. Topics include the physiology of hunger, development of food preferences, cuisines, and disordered eating.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY211	PAAR TRAINING IN SEXUAL ASSAULT COUNSELING	3

Course Code	Course Information	Credits
PSY213	<p>This course will provide students with 40 hours of volunteer training developed and implemented by the Pittsburgh Action Against Rape (PAAR). Successful completion of the training will qualify them as a Sexual Assault Counselor.</p> <p>STATISTICS AND RESEARCH DESIGN</p> <p>This course is designed to introduce students to essential research tools. Topics include frequency distributions, indices of central tendency, variability, and various inferential statistics, including nonparametric techniques. This course also examines research design procedures with an emphasis on analysis of variance. Priority given to psychology, social work and forensics majors.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY215	<p>Major approaches to "helping" are examined and compared within two basic course orientations: a person-centered framework and a rational-emotive one. Interviewing and listening skills are discussed and practiced. The course also features guest lecturers who are practitioners in human-services settings.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY217W	<p>In this course, students will use a collection of classic articles from the history of psychology, as well as contemporary psychological research, to develop an understanding of the critical thinking and writing skills used in psychological theory building, research, and the evaluation of research results.</p> <p>CRITICAL THINKING IN PSYCHOLOGY</p>	3

Course Code	Course Information	Credits
PSY225	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology <p>DEATH AND DYING</p> <p>This course explores the psychological and social impact of death. While such study will include theoretical approaches to death and bereavement, attention also will be focused on individual, cultural, and situational differences. It examines the phenomenon of death as understood by family members, physicians, nurses, and the dying themselves.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology • SWK101 : Introduction to Sociology 	3
PSY230	<p>ANIMAL BEHAVIOR</p> <p>A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY236	<p>PSYCHOLOGY OF WOMEN</p> <p>The course examines current theory and research on the psychology of women. topics include the development of gender roles, gender comparisons, women and work, love relationships, women's physical and mental health, violence against women, and women in later adulthood. Students who take this course should acquire an understanding of what it means to be a female in North America.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3

Course Code	Course Information	Credits
PSY243	<p>HEALTH PSYCHOLOGY</p> <p>An examination of the psychological processes that influence physical health. Topics include stress and coping; nutrition, weight control, and diet; managing and controlling pain; substance abuse; and health promotion.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY251	<p>HUMAN GROWTH AND DEVELOPMENT</p> <p>Physical, cognitive, social, and emotional development are studied throughout the life span. Major theories of development are discussed. Applications and examples are presented from applied contexts. Special needs of individuals at various stages throughout the life span are addressed. Does NOT count toward the Psychology major.</p>	3
PSY307	<p>COGNITIVE PSYCHOLOGY</p> <p>A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY313	<p>SPECIAL TOPICS IN PSYCHOLOGY</p> <p>This course is designed to allow students to explore in depth a specific topic or area of psychology. Topics will vary from year to year and might include coping and adaptation, history and systems of psychology, psychology of eating and eating disorders, or evaluation of self-help literature and programs.</p> <p>Pre-Requisites: Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • PSY101 : General Psychology 	
PSY314W	<p>FOUNDATIONS OF BEHAVIORAL RESEARCH</p> <p>This course examines the scientific method employed by psychologists. Topics include sampling, validity and reliability, experimentation, and field research. Students also conduct laboratory assignments on areas within learning, cognition, and social psychology.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY213 : Statistics and Research Design 	3
PSY323	<p>PERSONALITY</p> <p>A survey of individual characteristics from four conceptual strategies: psychoanalytic, dispositional, phenomenological, and behavioral. All conceptual strategies address issues of theory, assessment, research, and personality change. Emphasis is on enduring principles and contemporary issues, illustrated with selected examples and personal application.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY324	<p>MOTIVATION</p> <p>A survey of concepts and data related to the arousal and direction of behavior.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY326	<p>PSYCHOLOGY OF LEARNING</p> <p>An overview of the principles and research associated with modern learning theory. Topics include classical conditioning, operant learning, reinforcement theory, and stimulus control of behavior.</p>	3

Course Code	Course Information	Credits
PSY331	<p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• PSY101 : General Psychology <p>SOCIAL PSYCHOLOGY</p> <p>An examination of human social behavior with an emphasis on social influences that people have upon the beliefs or behaviors of others. Representative topics include conformity, persuasion, social cognition, prejudice, aggression, and interpersonal relationships.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• PSY101 : General Psychology 	3
PSY333	<p>ABNORMAL BEHAVIOR</p> <p>A study of definitions of normality and abnormality, functional and organic syndromes, theories of causation, and procedures for the diagnosis and modification of disturbed behavior.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• PSY101 : General Psychology 	3
PSY340	<p>PSYCHOPHARMACOLOGY</p> <p>The influence of drugs on behavior and psychological state. Topics include neuron morphology, neurochemistry, principles of pharmacology, and the action and effects of psychotropic drugs.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> <li>• PSY101 : General Psychology 	3
PSY341	<p>PSYCHOBIOLOGY</p> <p>An examination of the biological correlates of behavior. Emphasis is placed on the central nervous system and its structure, organization, and function. Specific topics considered</p>	3

Course Code	Course Information	Credits
	<p>are sleep, learning, memory, sexual behavior, motivation, and complex processes such as thought and language.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	
PSY342	<p>ADDICTION</p> <p>This course will provide a broad dimensional perspective about how the brain and behavior are affected by drugs and other addictive behaviors. Neuroscientific theories of addiction, treatment considerations, biological and personality factors affecting vulnerability to addiction, and prevention strategies will be discussed.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY351	<p>CHILDHOOD AND ADOLESCENCE</p> <p>A general introduction to theories and methods of developmental psychology. The course covers patterns and possible mechanisms of behavioral development from conception through adolescence. Audio- and videotapes of infants, children, and their families supplement lectures, discussions, and written exercises. The life-span perspective is continued in PSY 352.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY352	<p>ADULT DEVELOPMENT</p> <p>The periods of adolescence and adulthood are examined through current theories of development. A life cycle perspective is adopted to study physical, cognitive and social/emotional development. Questions of qualitative changes, continuity/discontinuity stages, individual differences and the</p>	3

Course Code	Course Information	Credits
	<p>impact of biological, environmental and cultural factors throughout adulthood are addressed. This course is designed to follow PSY 351, but may be taken as a stand-alone course.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	
PSY357	<p>ADOLESCENCE & THE TRANSITION TO ADULTHOOD</p> <p>An in-depth study of the biological, cognitive, and psychosocial aspects of adolescent development and the transition to adulthood (including individuals ages 18-25 years), with a focus on how healthy development during this period can be enhanced by parenting and educational strategies.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY357W	<p>ADOLESCENCE & THE TRANSITION TO ADULTHOOD</p> <p>An in-depth study of the biological, cognitive, and psychosocial aspects of adolescent development and the transition to adulthood (including individuals ages 18-25 years), with a focus on how healthy development during this period can be enhanced by parenting and educational strategies.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY362	<p>WHAT IS EVIL?</p> <p>This course will utilize an interdisciplinary framework (criminology, sociology, psychology, history, political science) to examine definitions of "evil," motivations to commit "evil" actions, social reactions to "evil," and control of "evil."</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CRM101 : Introduction to Criminal Justice 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • PSY101 : General Psychology 	
PSY401	<p>INDIVIDUAL RESEARCH</p> <p>Intensive study of a specific research problem by survey of literature, data collection, and data analysis with the supervision and collaboration of a faculty member, possibly in collaboration with other students who are working on the same problem or related ones. Minimum registration: one term or interim; repeated registration to a total of three permitted. This course is ideal preparation for tutorial work in psychology. Prerequisite(s): PSY 101, 213, 214, or permission of the instructor.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	1
PSY402	<p>INDIVIDUAL RESEARCH</p> <p>Intensive study of a specific research problem by survey of literature, data collection, and data analysis with the supervision and collaboration of a faculty member, possibly in collaboration with other students who are working on the same problem or related ones. Minimum registration: one term or interim; repeated registration to a total of three permitted. This course is ideal preparation for tutorial work in psychology. Prerequisite(s): PSY 101, 213, 214, and permission of the instructor.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	2
PSY403	<p>INDIVIDUAL RESEARCH</p> <p>Intensive study of a specific research problem by survey of literature, data collection, and data analysis with the supervision and collaboration of a faculty member, possibly in collaboration</p>	3

Course Code	Course Information	Credits
	<p>with other students who are working on the same problem or related ones. Minimum registration: one term or interim; repeated registration to a total of three permitted. This course is ideal preparation for tutorial work in psychology. Prerequisite(s): Psychology 101, 213, 214, and permission of the instructor.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	
PSY430	<p>INTRODUCTION TO SPORT AND EXERCISE PSYCHOLOGY</p> <p>This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY101 : General Psychology 	3
PSY490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete all 2 of the following courses: <ul style="list-style-type: none"> • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	
PSY491	INDEPENDENT STUDY Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
PSY492	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
PSY493	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
PSY494	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	4
PSY498	TUTORIAL: PSYCHOLOGY	4
PSY499	TUTORIAL: PSYCHOLOGY	4
PSY501	FOUNDATIONS OF COUNSELING PSYCHOLOGY The course introduces students to the field of counseling	3

Course Code	Course Information	Credits
	psychology, including the historical roots, current values, and training curriculum. The course also engages students in experiential learning of the theory and practice of basic counseling skills.	
PSY503	<p>APPLIED BIOLOGICAL PSYCHOLOGY</p> <p>The course addresses biological aspects of human psychology, including the biological basis of neurological deficits and mental disorders, and the use psychotropic medications for treating mental illnesses. Topics also include stress and health, mental disorders such as depression, anxiety, and schizophrenia, and contemporary issues in biological psychology.</p>	3
PSY506	<p>ESSENTIALS OF INFANT MENTAL HEALTH</p> <p>This course will provide an introduction and overview of Infant Mental Health (IMH). Core theoretical concepts related to the practice of IMH will be examined. Emphasis will be placed on understanding how IMH principles provide a foundation for working with infants, toddlers, and families across settings and disciplines.</p>	3
PSY509	<p>INFANT DEVELOPMENT</p> <p>This course will provide in-depth examination of infant development from conception to age 3. Participants will gain an understanding of the bio-psychosocial aspects of brain development, attachment theory, temperament, and the potential consequences of trauma and loss. The development of specific development milestones across key skills will be reviewed.</p>	3
PSY510	<p>INFANT-TODDLER ASSESSMENT</p> <p>This course will provide students with an introduction and hands on experience completing developmental assessment of infants</p>	3

Course Code	Course Information	Credits
	<p>from a multidisciplinary perspective. Participants will learn to assess infant development of milestones in cognitive, social-emotional, communication, adaptive skills as well as sensory integration.</p>	
PSY511	<p>PAAR TRAINING IN SEXUAL ASSAULT COUNSELING</p> <p>This course will provide students with 40 hours of volunteer training developed and implemented by the Pittsburgh Action Against Rape (PAAR). Successful completing of the training will qualify them as a Sexual Assault Counselor.</p>	3
PSY514	<p>INFANT ATTACHMENT: A DUAL RELATIONSHIP</p> <p>This course will explore parent-infant interactions with specific emphasis on early attachment relationships between parents and child, problems in the attachments process, family systems, and interventions to improve the quality of parent-infant relationships. Opportunities to observe and assess attachment relationships and parent-infant interactions within different at-risk populations will be provided.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY629 : Human Development across the Life Span 	3
PSY516	<p>THE NICU EXPERIENCE</p> <p>This course reviews medical, developmental, psychological and social risk factors associated with neonatal intensive care unit (NICU) hospitalization for infants and families. The impact of NICU placement on parent-infant attachment, developmental milestone acquisition, and parent mental health will be explored. Mental health interventions in the NICU will be examined.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY506 : Essentials of Infant Mental Health • PSY509 : Infant Development 	3

Course Code	Course Information	Credits
PSY518	<p>FAMILY INTERACTIONS</p> <p>This course will provide students with in depth instruction and observation of parent-infant interactions, an understanding of family systems, and approaches to assessment and intervention within this relationship.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• PSY506 : Essentials of Infant Mental Health <li>• PSY506N : Essentials of Infant Mental Health <p>Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> <li>• PSY509 : Infant Development <li>• PSY509E : Infant Development <li>• PSY509N : Infant Development 	3
PSY530	<p>INTRODUCTION TO SPORT AND EXERCISE PSYCHOLOGY</p> <p>This course is designed to introduce students to the basic concepts and intervention techniques of sport and exercise psychology. Topics covered will include motivation theory applied to sport, team dynamics, an introduction to psychological skills training, the psychology of sport injury, and issues pertinent to exercise adoption, adherence, and drop-out.</p>	3
PSY555	<p>STATISTICS AND RESEARCH METHODS</p> <p>The course provides a basic review of descriptive and inferential statistics and how these techniques are used with research methods in counseling psychology. Students will become proficient in computer analysis of data sets, designing and evaluating research designs and techniques, and understanding primary research in counseling literature.</p>	3
PSY602	<p>SPORT AND EXERCISE PSYCHOLOGY INTERVENTIONS</p> <p>Students in this course will become competent in the</p>	3

Course Code	Course Information	Credits
	<p>understanding and application of the core mental skills of sport and exercise psychology across settings and across the lifespan.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PSY530 : Introduction to Sport and Exercise Psychology 	
PSY605	<p>BIOPSYCHOLOGY</p> <p>This course focuses on the development of the brain and nervous system, interconnections between the human body's biological systems, and types and mechanisms of psychopharmacological interventions for psychological disorders.</p>	3
PSY617	<p>PSYCHOLOGY OF CULTURE AND IDENTITY</p> <p>The course addresses issues of culture and identity, as related to counseling and therapeutic relationships. Sociopolitical, socioeconomic, familial, and psychological aspects of diversity, identity, and culture are explored through readings, seminars, and experiential exercises. Students challenge underlying assumptions and develop effective skills to work with diverse populations.</p>	3
PSY621	<p>ADVANCED SEMINAR IN DIVERSITY ISSUES</p> <p>The course further develops the multicultural competency of counselors in relation to specific selected topics related to diversity and counseling. This is an elective course.</p>	3
PSY627	<p>VOCATIONAL/CAREER COUNSELING</p> <p>The course addresses the issues involved in the lifelong process of vocational development, through exploration of theories and assessment approaches in career counseling. Additional topics addressed include self-awareness, career awareness and assessment, career decision making and</p>	3

Course Code	Course Information	Credits
	planning, and career implementation.	
PSY629	<p>HUMAN DEVELOPMENT ACROSS THE LIFE SPAN</p> <p>The course explores cognitive, social, emotional and physiological development throughout the life span. While including concentration on the major theoretical approaches to life span development, an equally significant focus will be on practical application of material.</p>	3
PSY632	<p>POSITIVE PSYCHOLOGY</p> <p>Positive Psychology is the study of how humans do well and flourish. This course is an introduction to positive psychology theories and techniques. Didactic, experiential, and interactive elements will be used to explore concepts, research, interventions, and exercises that positive psychology has contributed to the larger field of psychology.</p>	3
PSY635	<p>CONCEPTS OF MENTAL HEALTH AND ILLNESS</p> <p>The course provides an overview of concepts of mental health and its development, and of the etiologies of psychopathology, from a culturally sensitive perspective. Students learn to recognize the complex biological and environmental contributors to mental illness, and to evaluate effective treatment approaches for mental illness.</p>	3
PSY642	<p>ASSESSMENT</p> <p>The course covers the basics of psychological assessment. The importance of integrating information from various sources when formulating hypotheses and diagnostic impressions and when developing treatment plans is emphasized. Other topics include interviewing, mental status examinations, psychophysiological strategies, psychological tests related to various diagnostic groupings, and program evaluation.</p>	3

Course Code	Course Information	Credits
PSY645	<p>ENVIRONMENTAL PSYCHOLOGY</p> <p>Students will explore concepts, research, and practice related to the interface between environment and psychology. The course emphasizes the effects that environmental and climate change issues have on human health and well-being.</p>	3
PSY646	<p>INTERGROUP DIALOGUE FACILITATION TRAINING</p> <p>This course gives students a foundation to facilitate intergroup dialogue classes and workshops. The topics of this course include group facilitation skills; individual and group social identity development; impact of prejudice and stereotyping; difference and dominance and the nature of social oppression; culture, cultural cues and judgments.</p>	3
PSY647	<p>INTERGROUP DIALOGUES:</p> <p>To facilitate intergroup understanding, students participate in face-to-face conversations and readings across social identities. Students discuss relevant material and explore group experiences, cross social identities and instructional contexts and examine historical, psychological and sociological materials leading to understanding of self and other.</p>	3
PSY653	<p>REFLECTIVE OBSERVATION</p> <p>This supervised field placement observation experience focuses on integration of infant mental health theory and practice. The course requires 100 hours of field observation and attendance at weekly reflective consultation seminars. Classes will involve shared exploration and examination of observed dyadic interactions within various child and family serving systems and environments.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • PSY506 : Essentials of Infant Mental Health • PSY509 : Infant Development • PSY510 : Infant-Toddler Assessment • PYS512 : Practices & Principles of Infant Mental Health Int 	
PSY655	<p>REFLECTIVE CONSULTATION I</p> <p>Students will use observations and experiences at field placement sites to develop and/or strengthen their ability to use reflective practice principles to conceptualize, support and, for students in the LPC programs, counsel from the Infant Mental Health perspective. The course provides a reflective group consultation experience for students. A treatment team approach will be taken to assist students in developing skills for case observation, conceptualization, treatment planning, use of therapeutic interventions, and clinical decision making skills. Topics such as development, gender, ethnicity and ethics will be included in classroom discussions on a regular and as-needed basis.</p> <p>Pre-Requisites:</p> <p>Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • PSY506 : Essentials of Infant Mental Health • PSY509 : Infant Development • PSY510 : Infant-Toddler Assessment • PYS512 : Practices & Principles of Infant Mental Health Int 	3
PSY656	<p>REFLECTIVE CONSULTATION II</p> <p>Students will use observations and experiences at field placement sites to develop and/or strengthen their ability to use reflective practice principles to conceptualize, support and, for students in the LPC programs, counsel from the Infant Mental Health perspective. The course provides a reflective group consultation experience for students. A treatment team approach will be taken to assist students in developing skills for case observation, conceptualization, treatment planning, use of therapeutic interventions, and clinical decision making skills. Topics such as development, gender, ethnicity and ethics will be included in classroom discussions on a regular and as-needed</p>	3

Course Code	Course Information	Credits
	<p>basis.</p> <p>Pre-Requisites: Complete all 4 of the following courses:</p> <ul style="list-style-type: none"> • PSY506 : Essentials of Infant Mental Health • PSY509E : Infant Development • PSY510 : Infant-Toddler Assessment • PYS512 : Practices & Principles of Infant Mental Health Int 	
PSY657	<p>PSYCHOPATHOLOGY & RESILIENCE</p> <p>The course provides an overview of psychopathology. Students learn to recognize the complex biological, cultural, and environmental contributors to mental illness, and to diagnose mental disorders using standardized criteria. Students will also study the concept of resilience and its role in contributing to health and well-being.</p>	3
PSY658	<p>EVIDENCE-BASED PRACTICE</p> <p>This course provides an introduction to evidence-based practice in applied psychology, emphasizing a counseling psychology perspective to understanding human problems. The course focuses on the methodological issues in developing an empirical basis for psychological treatments, and understanding the evidence base for treatment, therapist, client, and therapeutic relationship effects.</p>	3
PSY660	<p>COUNSELING THEORIES AND TECHNIQUES I</p> <p>The course presents the following approaches to counseling: psychoanalytic, psychodynamic, Adlerian, interpersonal process, Gestalt, postmodern, and feminist. The course includes both theory and opportunities to develop and practice skills related to the theories.</p>	3
PSY661	<p>COUNSELING THEORIES AND TECHNIQUES II</p> <p>The course presents the following approaches to counseling:</p>	3

Course Code	Course Information	Credits
	behavioral, cognitive, cognitive-behavioral, reality, mindfulness-informed therapies, person-centered, humanistic, existential, and integrative. The course includes both theory and opportunities to develop and practice skills related to the theories.	
PSY662	THEORIES AND TECHNIQUES OF COUNSELING	3
	This course explored a variety of counseling theories and techniques to provide a foundation for the practice of professional counseling from a culturally sensitive perspective. The course emphasizes current professional research and practice related to counseling theories and techniques, and provides opportunities for skill practice.	
PSY663	FOUNDATIONS OF HEALTH PSYCHOLOGY	3
	Students will explore how psychological processes influence physical health. Further, the psychological sequelae of physical illness will be examined. Students will delve into the mind-body connection with consideration given to the cultural context. The role of the counseling psychologist as a member of the healthcare team will be explored.	
PSY665	ADDICTIONS COUNSELING	3
	The course addresses a variety of addiction topics, including chemical dependency, eating disorders, sexual addiction, the chemically dependent offender, and women's issues in addiction. Several treatment models are explored, with emphases on effectiveness of treatment approaches and on multicultural sensitivity.	
PSY668	CRISIS, TRAUMA AND RECOVERY	3
	The course is an introduction to the field of psychological trauma, examining the historical development of trauma as a	

Course Code	Course Information	Credits
	clinical entity and an overview of theories and strategies for treating trauma. Students will learn to identify and work with their own reactions to clients who present trauma issues.	
PSY669	FOUNDATIONS OF EXPRESSIVE ARTS THERAPY	3
	This class explores the use of various expressive art modalities and theoretical approaches, including Eastern traditions, Jungian psychology, and other sources. The student will participate in experiential exercises to further understanding of the expressive arts theories and applications.	
PSY671	MINDFULNESS COUNSELING	3
	This course explores mindfulness and acceptance based approaches to counseling and discusses the integration of art and science when utilizing these approaches. Students will examine current research about efficacy of such approaches, and also develop beginning skills in these approaches.	
PSY672	GROUP COUNSELING	3
	The course explores the theory and practice of group experience from the perspectives of a member and observer. Topics include basic elements of group dynamics, interpersonal styles as they affect or hinder group functioning, role identity, leadership style, and application of group skills in organizations.	
PSY673	COUPLES COUNSELING	3
	This advanced course covers selected theories and techniques related to couples counseling. The emphasis in the course is on practical application of the theories.	
	<p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY501 : Foundations of Counseling Psychology • PSY662 : Theories and Techniques of Counseling 	

Course Code	Course Information	Credits
PSY674	<p>FOUNDATIONS OF FAMILY THERAPY</p> <p>The course focuses on the evaluation and treatment of psychological symptoms from the perspective of the family and systems theory. The history and evolution of the family movement will be presented and multiple family therapy modalities introduced, with an emphasis on selected theories and applications.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY501 : Foundations of Counseling Psychology • PSY662 : Theories and Techniques of Counseling 	3
PSY676	<p>COUNSELING CHILDREN AND ADOLESCENTS</p> <p>The course focuses on issues and concepts related to counseling children and adolescents with social and/or emotional problems. Topics include significant differences between children/adolescents and adults; theories of normal child development and temperament; and conceptualization and effective treatment of problems.</p>	3
PSY677	<p>GRIEF COUNSELING</p> <p>The course introduces students to the techniques, strategies, and treatment modalities counselors use to work with adults, children, and families dealing with bereavement. The class focuses on psychological, somatic, cultural, and spiritual aspects of grief and loss. Other topics included are interventions, community resources, and diverse religious and cultural practices.</p>	3
PSY678	<p>RISK AND RESILIENCE IN CHILDHOOD</p> <p>The course covers child/adolescent psychopathology and psychological assessment of children and adolescents. Specific topics include diagnostic and assessment issues specific to children and adolescents; psychological and developmental</p>	3

Course Code	Course Information	Credits
	disorders specific to children and adolescents; and related social and cultural issues.	
PSY681	PROFESSIONAL INTEGRATION SEMINAR	3
	The course explores ethical conceptualization, analysis, and practices of applied and counseling psychologists. Topics include the ethical standards of the American Psychological Association and the American Counseling Association, the history of applied psychology, and the developing mental health counseling movement. Certification, licensure, and regulatory practices are also discussed.	
PSY682	PRACTICUM	3
	The course is an entry-level fieldwork course in which students obtain supervised counseling experience. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats.	
PSY685	SUPERVISED INTERNSHIP I	3
	The course is a supervised field placement experience focusing on integration of theory and practice. The course requires attendance at a weekly seminar on campus, which involves presentations focusing predominantly on assessment, diagnosis, and case conceptualization.	
PSY686	SUPERVISED INTERNSHIP II	3
	The course enhances students' abilities to effectively offer mental health treatment and services to clients. Activities include discussion of issues in contemporary counseling psychology and treatment planning, formal case presentations, and completion of the graduate portfolio.	
	Pre-Requisites:	

Course Code	Course Information	Credits
	Complete the following course: <ul style="list-style-type: none"> • PSY682 : Practicum 	
PSY687	ADVANCED INTERNSHIP I The course provides an advanced field placement opportunity for students who want to further develop counseling skills with a particular population and/or develop new skills with a population different from the ones worked with in prior field placements. Additional fee(s): Clinical fee.	3
PSY691	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
PSY692	INDEPENDENT STUDY Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
PSY693	INDEPENDENT STUDY Independent Study Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
PSY706	HISTORY OF PSYCHOLOGY This course focuses on contemporary perspectives and historical and philosophical foundations of counseling psychology. The course emphasizes modern theories and practices of counseling psychology as a social science and profession, particularly as related to sustainable health and well-being for individuals, families, and communities.	3

Course Code	Course Information	Credits
PSY707	<p>SOCIAL PSYCHOLOGY</p> <p>This course provides an overview of historical and current trends in social psychology. Major theories and research findings relating to group dynamics, attitude change, prejudice, and others are presented. Contemporary critiques of the field and the relevance of social psychology to social change and the helping professions are discussed.</p>	3
PSY708	<p>COGNITIVE & AFFECTIVE BASES OF BEHAVIOR</p> <p>The course addresses empirically supported theories of Cognition and Affect and their influence on human behavior. Cognitive understanding of how humans learn, process and retain information and its role in human activities will be examined. Affect will be examined through review of early attachment relationships, emotional regulation, and social-emotional processes.</p>	3
PSY709	<p>INTELLECTUAL ASSESSMENT</p> <p>The course prepares students to administer tests of cognitive functions. Students will examine theory and clinical assessment of cognitive functioning including basic psychometric principles. Practical experiences are offered in test administration, scoring, interpretation, and professional report writing.</p>	3
PSY710	<p>FOUNDATIONS OF PSYCHOLOGICAL INTERVENTIONS</p> <p>This course will review basic therapeutic modalities used in psychological interventions. Processes of change are discussed, as well as the role of evidence-informed practice in interventions with individuals, groups, families, and communities.</p>	3

Course Code	Course Information	Credits
PSY711	<p>MULTICULTURAL & DIVERSITY ISSUES IN COUNSELING PSYCH</p> <p>The course provides an in-depth exploration of cultural differences as they impact the counseling relationship. Identity development theory will be examined, as will multicultural research methods and findings. Finally, the significance of both between-group and within-group differences will be explored for their relative influence on the process of therapeutic change.</p>	3
PSY712	<p>ADVANCED RESEARCH DESIGN</p> <p>This course reviews essential concepts in research design and statistics, with an emphasis on ensuring that students are capable of critically evaluating research studies and drawing reasonable conclusions from those studies. Students will have a strong foundation in research design and proficiency in statistics after having completed this course.</p>	4
PSY714	<p>PERSONALITY THEORY AND ASSESSMENT</p> <p>The course covers theories of personality and prepares students to administer, score, interpret, and write reports about commonly used instruments for the assessment of personality. Approaches and instruments included will be interviewing techniques, personality inventories, projective tests.</p>	3
PSY715	<p>ETHICAL ISSUES IN COUNSELING PSYCHOLOGY</p> <p>This course will focus on providing students with the knowledge, skills, and experiences necessary to perform ethical practice with clients across the full dimension of human experience, using the APA Ethics Guidelines as a foundation.</p>	3
PSY716	<p>PSYCHOMETRICS</p> <p>The course offers theories and techniques related to the design, administration, and interpretation of quantitative tests</p>	2

Course Code	Course Information	Credits
	measuring psychological variables such as intelligence, aptitude, and personality traits. It does not involve actual test design, administration and interpretation, but does explore theories and techniques related to these activities.	
PSY718	<p>PSYCHOLOGY AND SUSTAINABILITY</p> <p>The course presents the interface between environment and sustainability issues and the discipline of counseling psychology. Students review psychological literature about the relationship between environmental problems/solutions and human health and well-being, as well as implications of this for psychologists' work with individuals, families, and communities.</p>	3
PSY720	<p>NEUROPSYCHOLOGICAL ASSESSMENT</p> <p>This course focuses on the construct of brain-based behavior, including the measures used to assess brain-based behavior, the various domains and interconnections among these domains of neurocognitive functioning, interpreting results from such measures, as well as applying these results and interpretations to daily functioning and making appropriate treatment recommendations.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY709 : Intellectual Assessment • PSY716 : Psychometrics 	3
PSY730	<p>PSYCHOLOGY OF EMERGING ADULTHOOD</p> <p>This course explores developmental theory pertaining to the timespan between adolescence and adulthood. Identity exploration in the areas of education, work, interpersonal relationships, and culture will be examined through current and seminal research. Developmental considerations for working with this population will be highlighted.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	<p>Complete the following course:</p> <ul style="list-style-type: none"> • PSY629 : Human Development across the Life Span 	
PSY741	<p>PRE-PRACTICUM</p> <p>This course prepares students, and is a pre-requisite, for field placements in settings that provide psychological services. The course reviews the Diagnostic & Statistical Manual and emphasizes integration of basic assessment and intervention activities, as well as ethical and professional issues in psychology.</p>	3
PSY746	<p>PRACTICUM I</p> <p>This course is a field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 300 hours on site in addition to participating in the weekly group supervision class. Additional fee(s): Clinical fee.</p>	3
PSY746A	<p>PRACTICUM I</p> <p>This course is a field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 300 hours on site in addition to participating in the weekly group supervision class. Additional fee(s): Clinical fee.</p>	1
PSY746B	<p>PRACTICUM I</p> <p>This course is a field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in</p>	2

Course Code	Course Information	Credits
	group and individual formats for 300 hours on site in addition to participating in the weekly group supervision class. Additional fee(s): Clinical fee.	
PSY746C	<p>PRACTICUM I</p> <p>This course is a field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 300 hours on site in addition to participating in the weekly group supervision class. Additional fee(s): Clinical fee.</p>	3
PSY750A	<p>PRACTICUM II</p> <p>This course is the second field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	1
PSY750B	<p>PRACTICUM II</p> <p>This course is the second field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	2
PSY750C	<p>PRACTICUM II</p> <p>This course is the second field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions</p>	3

Course Code	Course Information	Credits
	in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.	
PSY780	<p>PROFESSIONAL SEMINAR IN COUNSELING PSYCHOLOGY</p> <p>This seminar explores the history of counseling psychology, professional identity, professional organizations, diverse populations, research and publishing, training issues, and professional ethics. Students will explore the scientific foundations of the counseling psychology profession and application of that foundational knowledge in counseling interviews.</p>	3
PSY800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
PSY801	<p>FAMILY-FOCUSED SYSTEMIC INTERVENTIONS</p> <p>The class focuses on theories and interventions related to conceptualization and improvement of interactions within family systems. A framework of family science and evidence-informed approaches is emphasized. Students will examine general systems theory, family systems interventions, trans-generational theory, modern and post-modern adaptations of family intervention, and multi-systemic approaches.</p>	3
PSY804	<p>VOCATIONAL ISSUES IN COUNSELING PSYCHOLOGY</p> <p>Theories of vocational choice as well as career decision making, planning and lifelong career development will be addressed. Current issues in field of vocational counseling will be integrated with well-established theories and methods of vocational assessment.</p>	3

Course Code	Course Information	Credits
PSY805	<p>GROUP PROCESSES AND INTERVENTIONS</p> <p>The course explores the active ingredients of change present across a variety of group interventions, diverse settings, populations, and problems. Course topics include: science and theory of group dynamics, ethical issues in group work, group stage development models, therapeutic factors, multicultural competence, leadership/facilitation style, evidence-based practice and practice-based evidence.</p>	3
PSY806	<p>SUPERVISION AND LEADERSHIP</p> <p>This course introduces students to theories, research, roles and activities of supervision, consultation, and leadership in counseling psychology. The course is both didactic and experiential. For all activities, issues of diversity, ethics, and professional practice will be discussed.</p>	3
PSY809	<p>ADVANCED DEVELOPMENTAL PSYCHOLOGY</p> <p>In this course, students critically review classic and contemporary theories and research in developmental psychology. Students describe how the theories and research apply to psychology practice, develop additional research questions to further knowledge in the field, and become familiar with ethical and cultural issues related to developmental psychology.</p>	3
PSY810	<p>ADVANCED DATA ANALYSIS</p> <p>This course introduces advanced concepts in data analysis, with an emphasis on ensuring that students are capable of designing research studies and selecting and implementing appropriate methods of data analysis. Students will work on their dissertation proposals in this</p>	4
PSY814	<p>PSYCHOPATHOLOGY, RESILIENCE, AND EVIDENCE-</p>	3

Course Code	Course Information	Credits
	<p>BASED PRACTICE</p> <p>The course addresses theories and research related to psychopathology, as well as the strength-based perspective in counseling psychology. Major approaches to understanding adaptive and maladaptive behavior of individuals, such as psychoanalytic, humanistic, social constructivist, systemic, and social learning, will be discussed.</p>	
PSY815	<p>ORGANIZATIONS, COMMUNITIES, AND CONSULTATION</p> <p>This course will address theories and research related to functioning of organizations and communities. The counseling psychologist as consultant will be discussed, along with major principles and strategies for conducting system level assessments, and planning, implementation and evaluation of consultative interventions.</p>	3
PSY816	<p>HEALTH PSYCHOLOGY PRACTICE</p> <p>The course focuses on the interface between psychology and medicine, preparing students to use psychology interventions in the treatment and management of illness and to understand the role of psychologist in the interdisciplinary healthcare team. Theory, research, and practice of health psychology will be presented.</p>	3
PSY831	<p>INDEPENDENT STUDY</p> <p>Two needs may be met by this course: 1) a doctoral student may wish to develop an independent study in addition to completing the dissertation; 2) a doctoral student may have a required course waived based on previous study, but still need to earn credits to complete the doctoral degree. This is a one credit option.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	1

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
PSY832	<p>INDEPENDENT STUDY</p> <p>Two needs may be met by this course: 1) a doctoral student may wish to develop an independent study in addition to completing the dissertation; 2) a doctoral student may have a required course waived based on previous study, but still need to earn credits to complete the doctoral degree. This is a two credit option.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
PSY840A	<p>PRACTICUM III</p> <p>This course is the third field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	1
PSY840B	<p>PRACTICUM III</p> <p>This course is the third field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	2
PSY840C	<p>PRACTICUM III</p> <p>This course is the third field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in</p>	3

Course Code	Course Information	Credits
	group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.	
PSY841A	<p>PRACTICUM IV</p> <p>This course is the fourth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	1
PSY841B	<p>PRACTICUM IV</p> <p>This course is the fourth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	2
PSY841C	<p>PRACTICUM IV</p> <p>This course is the fourth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	3
PSY842A	<p>PRACTICUM V</p> <p>This course is an optional fifth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.</p>	1

Course Code	Course Information	Credits
PSY842B	PRACTICUM V This course is an optional fifth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.	2
PSY842C	PRACTICUM V This course is an optional fifth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 75-149 hours/term in addition to participating in the weekly group supervision class.	3
PSY845	PRACTICUM V This course is an optional fifth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 150 hours/term in addition to participating in the weekly group supervision class.	2
PSY848	PRACTICUM V This course is an optional fifth field placement in which students obtain training in psychological service provision. They work directly under the supervision of a qualified professional and obtain experience interviewing clients and conducting sessions in group and individual formats for 300 hours/term in addition to participating in the weekly group supervision class. Additional fee(s): Clinical fee.	3

Course Code	Course Information	Credits
PSY851	<p>SUPERVISED FIELD EXPERIENCE</p> <p>The course provides doctoral students the opportunity to obtain experience providing services in community settings. The course is reserved for those settings in which supervision is provided by professionals who are not licensed psychologists, but represent other professions (social work, psychiatry, counselors, etc.).</p>	1
PSY852	<p>SUPERVISED FIELD EXPERIENCE (2 CREDITS)</p> <p>The course provides doctoral students the opportunity to obtain experience providing services in community settings. The course is reserved for those settings in which supervision is provided by professionals who are not licensed psychologists, but represent other professions (social work, psychiatry, counselors, etc.).</p>	2
PSY853	<p>SUPERVISED FIELD EXPERIENCE (3 CREDITS)</p> <p>The course provides doctoral students the opportunity to obtain experience providing services in community settings. The course is reserved for those settings in which supervision is provided by professionals who are not licensed psychologists, but represent other professions (social work, psychiatry, counselors, etc.).</p>	3
PSY862A	<p>DISSERTATION I</p> <p>These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.</p>	1
PSY862B	<p>DISSERTATION I</p> <p>These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling</p>	2

Course Code	Course Information	Credits
	psychology.	
PSY862C	DISSERTATION I These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.	3
PSY863A	DISSERTATION II These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.	1
PSY863B	DISSERTATION II These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.	2
PSY863C	DISSERTATION II These courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.	3
PSY871A	DOCTORAL INTERNSHIP The doctoral internship is a year-long field experience for doctoral students who have completed all academic course work, comprehensive examinations, and dissertation proposal. The internship is a full-time supervised clinical experience obtained through a national search and matching process, and is required for the completion of the degree.	1
PSY871B	DOCTORAL INTERNSHIP	2

Course Code	Course Information	Credits
PSY871C	DOCTORAL INTERNSHIP	3
PSY871D	DOCTORAL INTERNSHIP	4
PSY871E	DOCTORAL INTERNSHIP	5
PSY871F	DOCTORAL INTERNSHIP	6

The doctoral internship is a year-long field experience for doctoral students who have completed all academic course work, comprehensive examinations, and dissertation proposal. The internship is a full-time supervised clinical experience obtained through a national search and matching process, and is required for the completion of the degree.

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The doctoral internship is a year-long field experience for

Course Code	Course Information	Credits
PSY872	<p>PRE-DOCTORAL INTERNSHIP 2</p> <p>The pre-doctoral internship is a year-long field experience for doctoral students who have completed all academic course work, comprehensive examinations, and dissertation proposal. The internship is a full-time supervised clinical experience obtained through a national search and matching process, and is required for the completion of the degree.</p>	6
PSY873	<p>PRE-DOCTORAL INTERNSHIP 3</p> <p>The pre-doctoral internship is a year-long field experience for doctoral students who have completed all academic course work, comprehensive examinations, and dissertation proposal. The internship is a full-time supervised clinical experience obtained through a national search and matching process, and is required for the completion of the degree.</p>	6
PTH633	<p>GLOBAL HEALTH PERSPECTIVES</p> <p>This course provides an opportunity for physical therapy students to study and experience global health issues by participating in an international service experience. It is intended to give students the opportunity to understand the culture and health care issues of the visited country.</p>	2
PTH690	<p>CLINICAL SKILLS</p> <p>This course provides an introduction to physical therapy clinical skills with an emphasis on basic assessment and intervention procedures, along with surface anatomy palpation. Principles relating to these foundational techniques will be introduced via</p>	3

Course Code	Course Information	Credits
	<p>lecture and laboratory experiences. The techniques will be applied in future courses in increasingly complex patient/client problems and diagnoses.</p>	
PTH691	<p>CLINICAL SCIENCES</p> <p>An in-depth analysis of normal and abnormal human motion with an emphasis on biomechanics, gait, patterns of motion and mechanisms that affect or limit movement. Principles of the physical therapy diagnostic process, along with therapeutic techniques, procedures and modalities will be introduced.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 : Human Gross Anatomy • BIO502L : Human Gross Anatomy Lab • PTH690 : Clinical Skills 	6
PTH701	<p>FOUNDATIONS OF MOVEMENT SCIENCE I</p> <p>An in-depth analysis of normal and abnormal human motion with an emphasis on biomechanics, gait, patterns of motion and mechanisms that affect or limit movement. Principles of the physical therapy diagnostic process, along with therapeutic techniques, procedures, and modalities will be introduced.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 : Human Gross Anatomy • BIO504 : Human Physiology • PTH700 : Introduction to Clinical Skills 	7
PTH702	<p>FOUNDATIONS OF MOVEMENT SCIENCE II</p> <p>This course includes the study and application of theories of motor control, motor learning, and motor development that are utilized to guide examination of children and adults with neuromuscular dysfunction. Movement analysis is expanded along a continuum from infancy to older age, incorporating age-related movement changes and theories of aging.</p>	3

Course Code	Course Information	Credits
PTH702	<p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• PTH701 : Foundations of Movement Science I <li>• PTH703II : Musculoskeletal Physical Therapy- Part Two <p>MOVEMENT SCIENCE</p> <p>This course includes the study and application of theories of motor control, motor learning, and motor development that are utilized to guide examination of children and adults with neuromuscular dysfunction. Movement analysis is expanded along a continuum from infancy to older age, incorporating age-related movement changes and theories of aging.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• BIO502 : Human Gross Anatomy <li>• BIO502 : Human Gross Anatomy 	3
PTH703I	<p>MUSCULOSKELETAL PHYSICAL THERAPY PART ONE</p> <p>The first part of this two-part course will provide in-depth preparation required to perform the examination, evaluation, and management of musculoskeletal conditions commonly encountered in physical therapy practice. The course includes the physical therapy diagnostic process, including differential diagnosis and development of evidence-based physical therapy plans of care.</p>	2
PTH703II	<p>MUSCULOSKELETAL PHYSICAL THERAPY- PART TWO</p> <p>The second part of this two-part course will provide in-depth preparation required to perform the examination, evaluation, and management of musculoskeletal conditions commonly encountered in physical therapy diagnostic process, including differential diagnosis and development of evidence-based physical therapy plans of care.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p>	10

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • PTH703I : Musculoskeletal Physical Therapy Part One 	
PTH704	<p>FUNDAMENTALS OF EXERCISE PHYSIOLOGY</p> <p>This course provides the basic principles of exercise physiology based upon how normal structure and physiological functioning in humans alters in response to bouts of physical activity. The importance of health promotion and wellness is emphasized. Laboratory sessions allow for participation in the components of a comprehensive fitness assessment.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 : Human Gross Anatomy • BIO504 : Human Physiology 	3
PTH706	<p>CLINICAL PHYSIOLOGY</p> <p>This course provides in-depth study of normal human physiologic mechanisms with special application to exercise. Topics include: protein synthesis, cell communication, and energy metabolism; neuromusculoskeletal, cardiovascular, respiratory, digestive, renal, immune and endocrine systems; and exercise prescription, health promotion, and wellness. Students will participate in comprehensive fitness assessments during laboratory sessions.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO502 : Human Gross Anatomy • BIO502L : Human Gross Anatomy Lab 	5
PTH707	<p>CARDIOVASCULAR AND PULMONARY PHYSICAL THERAPY</p> <p>This course provides didactic, laboratory and problem-based learning experiences in the examination, evaluation and treatment of patients with primary and secondary cardiac, vascular and/or pulmonary dysfunction. Content ranges from the development of individualized, scientifically-based fitness/wellness programs to the management of patients</p>	7

Course Code	Course Information	Credits
	<p>across the lifespan with a wide spectrum of acute illnesses and/or chronic conditions.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH703II : Musculoskeletal Physical Therapy- Part Two 	
PTH708	<p>PEDIATRIC PHYSICAL THERAPY</p> <p>This problem-based course will provide in-depth information on the examination, evaluation, and management of pediatric neuro-musculoskeletal system dysfunction from birth through adolescence and young adulthood. Students will build upon concepts of normal development, motor control, and motor learning to develop a theoretical framework for addressing the physical therapy needs of children.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PTH702 : Foundations of Movement Science II • PTH707 : Cardiovascular and Pulmonary Physical Therapy 	4
PTH709	<p>NEUROMUSCULAR PHYSICAL THERAPY</p> <p>This problem-based course explores the prevention, evaluation and management of neuromuscular system dysfunction throughout the adult life span. Students will build upon concepts from all previous courses to gain a comprehensive understanding of the multiple complex problems seen in patients with neurologic diagnoses.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PTH702 : Foundations of Movement Science II • PTH707 : Cardiovascular and Pulmonary Physical Therapy 	9
PTH713I	<p>MULTI-SYSTEM PHYSICAL THERAPY PART ONE</p> <p>The first part of this problem-based learning course emphasizes the physical therapy management of complex patients across the lifespan who present with pathology affecting multiple body</p>	1

Course Code	Course Information	Credits
	<p>systems. Students utilize advanced clinical decision-making skills to evaluate and prioritize interventions. Laboratory and problem-based learning experiences focus on educating and directing patients, families, and other providers is included.</p>	
PTH713II	<p>MULTI-SYSTEM PHYSICAL THERAPY-PART TWO</p> <p>The second part of this problem-based learning course continues with the physical therapy management of complex patients across the lifespan who present with pathology affecting multiple body systems. Students utilize advanced clinical decision-making skills to evaluate and prioritize interventions. Laboratory and problem-based learning experiences focus on educating and directing patients, families, and other providers is included.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH713I : Multi-System Physical Therapy Part One 	2
PTH722	<p>RESEARCH I</p> <p>The purpose of this course is to offer students the opportunity to gain knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy.</p>	3
PTH724I	<p>RESEARCH II PART ONE</p> <p>The purpose of this course is to offer students the opportunity to enhance their knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH722 : Research I 	1
PTH724II	<p>RESEARCH II-PART TWO</p>	1

Course Code	Course Information	Credits
	<p>The purpose of part II of this course is to offer students the opportunity to enhance knowledge and skills that are essential to the critical evaluation of the medical literature and the application of research to the practice of physical therapy.</p>	
PTH730	<p>CLINICAL EXPERIENCE I-A</p> <p>The first part of this ten-week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions. Satisfactory completion of all previous academic requirements is required.</p>	3
PTH730	<p>CLINICAL EXPERIENCE I-A</p> <p>The first part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.</p>	4
PTH731I	<p>CLINICAL EXPERIENCE IB-I</p> <p>The first part of this ten (10) week, full-time experience is scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.</p>	1
PTH731II	<p>CLINICAL EXPERIENCE IB-II</p> <p>The second part of this ten (10) week, full-time experience is</p>	3

Course Code	Course Information	Credits
PTH733	<p>scheduled at the completion of musculoskeletal system coursework. Students will be placed in outpatient facilities or general hospitals with an expectation that students, under the supervision of a licensed physical therapist, will primarily evaluate and treat patients with musculoskeletal conditions.</p> <p>CLINICAL EXPERIENCE II</p> <p>A ten (10) week full-time experience scheduled at the completion of study of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions. Satisfactory completion of all previous academic requirements is required.</p>	7
PTH735I	<p>The first part of this sixteen (16) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.</p> <p>CLINICAL EXPERIENCE V-PART ONE</p>	1
PTH735II	<p>The second part of this sixteen (16) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.</p> <p>CLINICAL EXPERIENCE V-PART TWO</p>	11

Course Code	Course Information	Credits
PTH741	<p>PRINCIPLES OF PRACTICE I: INTRO TO PT PRACTICE</p> <p>This course introduces the novice professional student to the roles of the physical therapist as: a professional; a communicator; and as a scholar. There is a heavy emphasis on patient-practitioner communication skills, especially during the patient interview. Fundamentals of evidence-based practice help students embrace the role of scholarly clinician.</p>	3
PTH742I	<p>PRINCIPLES OF PRACTICE II: COMMUNICATION AND ETHICS-PART ONE</p> <p>Part one of this course enhances basic concepts related to evidence-based practice, ethics and communication while introducing new concepts of health behavior and the current healthcare environment for application throughout the physical therapy curriculum.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • PTH741 : Principles of Practice I: Intro to PT Practice 	1
PTH742II	<p>PRINCIPLES OF PRACTICE II: COMMUNICATION AND ETHICS-PART TWO</p> <p>Part two of this course enhances basic concepts related to evidence-based practice, ethics, and communication while introducing new concepts of health behavior and the current healthcare environment for application throughout the physical therapy curriculum.</p>	2
PTH743	<p>PRINCIPLES OF PRACTICE III: ETHICAL ACTION AND SOCIAL RESPONSIBILITY</p> <p>This course is an integrated synthesis of material learned in previous Principles of Practice courses with practical application into clinical education. Students preliminarily explore the integration of social responsibility and professionalism via community-based learning.</p>	1

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH742II : Principles of Practice II: Communication and Ethics-Part Two 	
PTH744	<p>PRINCIPLES OF PRACTICE IV: SERVICE LEARNING</p> <p>This course is an integrated synthesis of material learned during previous POP courses. This course, guided by faculty and community service advisors, primarily evaluates the service learning project as it evolves over the past year. The evaluation will review the benefits of and obstacles to a meaningful learning experience. Students will discuss their contribution to the community agency and the population it serves, and will disseminate this to the Chatham physical therapy community through a group oral presentation.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • PTH743 : P.P. III: Integration of Psychosocial Issues and Social Responsibility • PTH743 : Principles of Practice III: Ethical Action and Social Responsibility 	1
PTH745I	<p>PRINCIPLES OF PRACTICE V: HEALTH CARE, MANAGEMENT & POLICY PART ONE</p> <p>Part one of this course integrates the principles of professional development with health care policy, delivery, and management.</p>	1
PTH745II	<p>PRINCIPLES OF PRACTICE V: HEALTHCARE, MANAGEMENT & POLICY- PART TWO</p> <p>Principles of Practice V integrates the principles of health care delivery, management, policy and leadership within the physical therapy profession.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH744 : Principles of Practice IV: Service Learning 	2

Course Code	Course Information	Credits
PTH746I	CLINICAL EXPERIENCE III-PART ONE	1
	<p>The first part of this eight (8) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.</p>	
PTH746II	CLINICAL EXPERIENCE III-PART TWO	5
	<p>The second part of this eight (8) week full-time experience is scheduled at the completion of didactic and laboratory course work. Students will generally be placed in acute care, acute rehabilitation, skilled nursing, pediatric, sub-acute, outpatient, or home health settings. Students will, under the supervision of a licensed physical therapist, primarily evaluate and treat patients with cardio/pulmonary and neurological conditions.</p>	
PTH747	CLINICAL EXPERIENCE IV	6
	<p>An eight-week, full-time experience in combination with PTH 746 Clinical Experience IV completed at the conclusion of didactic and laboratory course work. During this experience, the student will continue to develop competency in his or her entry-level professional physical therapy skills. An alternative to this course in combination with PTH 746 Clinical Experience IV is PTH 735 Clinical Experience III (16 weeks). Satisfactory completion of all previous academic requirements is required.</p>	
PTH748	RESEARCH III: EVIDENCE IN PRACTICE	2
	<p>In this course, students integrate previous curricular topics related to evidence based practice. Students develop and complete a presentation of the systematic review completed in PTH 724. Students also complete a Knowledge-to-Action</p>	

Course Code	Course Information	Credits
	<p>project aimed at increasing the use of research evidence in clinical practice.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PTH724II : Research II-Part Two 	
PTH797	<p>INDEPENDENT STUDY</p> <p>INDEPENDENT STUDY</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
PTH800	<p>CONTINUING GRADUATE CREDIT</p> <p>Continuing Graduate Credit</p>	1
PWR501	<p>INTRODUCTION TO PROFESSIONAL WRITING</p> <p>This foundational course is designed as an introduction to professional writing genres, models, standards, and formats of the online Master of Professional Writing degree. The course features practical writing and editing experience in a collaborative work environment. The class will establish a basic level of writing skills among MPW students and will begin with the development, or enhancement, of students' skills in analysis, synthesis, summarizing, and expository writing. In the latter part of the course, students focus on the techniques that make professional writing flow and hold the reader's interest. A workshop approach helps beginning writers learn to craft their work so that it reads smoothly and communicates effectively. Topics include creating leads that command interest, developing a story idea without floundering, making graceful and unobtrusive transitions, enriching the theme, and perfecting the ruthless art of self-editing. Students write short essays and critique their own published work.</p>	3

Course Code	Course Information	Credits
PWR506	<p>GRANT WRITING</p> <p>This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.</p>	3
PWR516	<p>TECHNICAL WRITING</p> <p>This course teaches students how to prepare letter reports and technical reports about subjects that require technical explanations, diagrams, charts, and jargon understood by technical readers. In addition, this course teaches students how to present technical information to technical readers so they understand the concepts and can apply them in their work.</p>	3
PWR517	<p>TEACHING TECHNICAL WRITING</p> <p>This course prepares the student to seek technical writing training and teaching positions, as well as pursue subsequent doctoral studies in professional writing. Topics covered include best-practices in teaching, as well as developing course objectives and syllabi. Professional journal publishing and curriculum vita preparation will also be presented.</p>	3
PWR521	<p>USE OF NEW AND SOCIAL MEDIA</p> <p>This course seeks to give students the skills and confidence to create interesting and informative digital presentations based on simple presentation design and delivery options.</p>	3
PWR525	<p>BUSINESS AND ORGANIZATIONAL WRITING</p> <p>This course teaches students the rhetorical principles and writing practices necessary for producing effective business letters, memos, reports, and collaborative projects in professional contexts. All sections are offered in networked computer classrooms to ensure that students taking the course</p>	3

Course Code	Course Information	Credits
	<p>are prepared for the writing environment of the 21st century workplace. The course teaches the rhetorical principles that help students shape their business writing ethically, for multiple audiences, in a variety of professional situations.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	
PWR532	<p>SCIENCE AND ENVIRONMENTAL WRITING</p> <p>This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.</p>	3
PWR552	<p>WRITING FOR MULTIMEDIA</p> <p>WRITING FOR MULTIMEDIA</p>	3
PWR562	<p>WRITING FOR DIGITAL MEDIA</p> <p>This class will prepare students to enter these fields by teaching the strategies and skills needed to make compelling interactive experiences. Specifically, students will focus on developing their abilities to conceptualize, design, and create multimedia</p>	3
PWR572	<p>PRINCIPLES OF INFORMATION ARCHITECTURE</p> <p>In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics</p>	3

Course Code	Course Information	Credits
	<p>with practical and contemporary applications and tools.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	
PWR573	<p>WEB DESIGN AND DEVELOPMENT I</p> <p>This course provides introduction to the technical skills needed for designing an online web presence. Students gain a fundamental primer in HTML, designing with CSS, and web site management, evaluating basic page structure from design mockups, creating website navigation, and image selection. Students will publish their web sites to the Internet. The class presumes no prior knowledge of web scripting, structure or design.</p>	3
PWR574	<p>WEB DESIGN AND DEVELOPMENT II</p> <p>A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.</p>	3
PWR601	<p>INTRODUCTION TO PROFESSIONAL WRITING</p> <p>This foundational course is designed as an introduction to professional writing genres, models, standards, and formats of the online Master of Professional Writing degree. The course features practical writing and editing experience in a collaborative work environment. The class will establish a basic level of writing skills among MPW students and will begin with the development, or enhancement, of students' skills in analysis, synthesis, summarizing, and expository writing. In the latter part of the course, students focus on the techniques that make professional writing flow and hold the reader's interest. A workshop approach helps beginning writers learn to craft their work so that it reads smoothly and communicates effectively. Topics include creating leads that command interest, developing a story idea without floundering, making graceful and</p>	3

Course Code	Course Information	Credits
	unobtrusive transitions, enriching the theme, and perfecting the ruthless art of self-editing. Students write short essays and critique their own published work.	
PWR606	<p>GRANT WRITING</p> <p>This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.</p>	3
PWR613A	<p>SPECIAL TOPICS:</p> <p>This course will explore different special topics in professional writing.</p>	1
PWR616	<p>TECHNICAL WRITING</p> <p>This course teaches students how to prepare letter reports and technical reports about subjects that require technical explanations, diagrams, charts, and jargon understood by technical readers. In addition, this course teaches students how to present technical information to technical readers so they understand the concepts and can apply them in their work.</p>	3
PWR617	<p>TEACHING TECHNICAL WRITING</p> <p>This course prepares the student to seek technical writing training and teaching positions, as well as pursue subsequent doctoral studies in professional writing. Topics covered include best-practices in teaching, as well as developing course objectives and syllabi. Professional journal publishing and curriculum vita preparation will also be presented.</p>	3
PWR620	<p>POLITICAL AND NEWS WRITING</p> <p>This course is designed to give students a working knowledge</p>	3

Course Code	Course Information	Credits
	of the practice of reporting and writing for newspapers, magazines and online venues. Through comprehensive writing projects and student prepared news blogs, students practice with the leading edge techniques and tools required for writing.	
PWR620	<p>POLITICAL AND NEWS WRITING</p> <p>Political and News Writing</p>	3
PWR621	<p>USE OF NEW AND SOCIAL MEDIA</p> <p>This course seeks to give students the skills and confidence to create interesting and informative digital presentations based on simple presentation design and delivery options.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	3
PWR625	<p>BUSINESS AND ORGANIZATIONAL WRITING</p> <p>This course teaches students the rhetorical principles and writing practices necessary for producing effective business letters, memos, reports, and collaborative projects in professional contexts. All sections are offered in networked computer classrooms to ensure that students taking the course are prepared for the writing environment of the 21st century workplace. The course teaches the rhetorical principles that help students shape their business writing ethically, for multiple audiences, in a variety of professional situations.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	3
PWR632	<p>SCIENCE AND ENVIRONMENTAL WRITING</p> <p>This course focuses on the practice of writing about science, environment, medicine, and technology for audiences ranging from the general public to scientists and engineers. It starts with</p>	3

Course Code	Course Information	Credits
PWR641	<p>basic science writing for lay audiences, emphasizing organization and clear writing techniques and also explores problems of conveying highly complex technical information to multiple audiences, factors that influence science communication to the public, and interactions between scientists and journalists.</p> <p>FINANCIAL WRITING</p> <p>This course is concerned with the communication of financial information in writing: How should financial professionals construct documents? What are the writing techniques needed to make the numbers tell their own story? Topics include genres of financial writing (reports, presentations, correspondence), successful writing strategies (audience analysis, grammar usage, information gathering), organizing information, and using tables and charts.</p>	3
PWR662	<p>WRITING FOR DIGITAL MEDIA</p> <p>This class will prepare students to enter these fields by teaching the strategies and skills needed to make compelling interactive experiences. Specifically, students will focus on developing their abilities to conceptualize, design, and create multimedia applications. Areas of focus will include: strategies for understanding and documenting audience needs and expectations; basics of effective user interface design; and typical process and artifacts involved with multimedia application development.</p>	3
PWR670	<p>PRINCIPLES OF INFORMATION ARCHITECTURE</p> <p>In this course students will learn about the evolution of the discipline and the underlying principles and fundamentals, including task analysis, scenario development, taxonomy creation, and findability design. We will build on these basics with practical and contemporary applications and tools.</p>	3

Course Code	Course Information	Credits
PWR673	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	3
PWR674	<p>WEB DESIGN AND DEVELOPMENT I</p> <p>This course will provide an introduction to the technical skills needed for designing on-line content and interactive multimedia. Current multimedia tools for use in creating web-based products will be taught with ample opportunity for practice. Students learn authoring tools and multimedia techniques while covering topics, including non-text-based communication, integration of visuals, the animation of text and graphics, and digital video web-deployment.</p>	3
PWR675	<p>WEB DESIGN AND DEVELOPMENT II</p> <p>A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.</p>	3
PWR694	<p>VISUAL AND INTERFACE DESIGN</p> <p>Students will use audience analysis to help develop wireframes and storyboards, progress to full interface design, as well as gain an appreciation for the basic elements of design and how content is an integral part of design. Students will focus on interactions and behaviors.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • PWR601 : Introduction to Professional Writing 	3
PWR694	<p>CLIENT PROJECT</p> <p>This required course for the Web Content Development concentration includes working on a client project for a real business customer. Students learn to develop statements of work, client agreements, and gain experience with direct</p>	3

Course Code	Course Information	Credits
	application of web content development principles.	
PWR699	<p>PROFESSIONAL WRITING PORTFOLIO</p> <p>This course must be taken as each student's last course in the MPW program. This capstone course is a self-directed, guided independent practicum in which the student will produce a written project to the specifications of a "client" in one of the disciplinary areas of study. At the same time, students will have the opportunity to participate in a workshop-style program in which they will analyze the editorial and communication interests of various consumers of writing services (corporate communication offices, magazines, online venues, etc.). The workshop will explore many areas of the business of being a writer and cover copyright and contracts, cover and query letters, standard business practices - and strategies for success.</p>	3
PYS512	<p>PRACTICES & PRINCIPLES OF INFANT MENTAL HEALTH INT</p> <p>This course introduces specific prevention and intervention approaches for promoting attachment relationships and social-emotional development in children aged 0 to 3 emphasizing evidence-based practice. Participants will gain valuable skills for assisting parents, caregivers, educators and children in the promotion of positive social, emotional and behavioral development.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> <li>• PSY506 : Essentials of Infant Mental Health <li>• PSY509 : Infant Development 	3
SCGL100	<p>*GEN ED: LAB SCIENCE</p> <p>*Gen Ed: Lab Science</p>	1

Course Code	Course Information	Credits
SCGL101	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL102	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL103	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL104	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL105	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL106	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL107	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL108	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL109	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1

Course Code	Course Information	Credits
SCGL200	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL201	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL202	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL203	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL204	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL205	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL206	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL207	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL208	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1

Course Code	Course Information	Credits
SCGL209	GEN ED: LAB SCIENCE Gen Ed: Lab Science	1
SCGL300	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL301	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL302	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL303	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL304	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL305	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL306	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL307	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1

Course Code	Course Information	Credits
SCGL308	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL309	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL400	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL401	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL402	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL403	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL404	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL405	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL406	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1

Course Code	Course Information	Credits
SCGL407	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL408	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SCGL409	*GEN ED: LAB SCIENCE *Gen Ed: Lab Science	1
SDE090	SSON PREP: SCIENCE AND MATH This course is designed for the student who is preparing for the Nursing School Entrance examination and would benefit from a structures review of science and math. Modules are taught covering basic mathematics, statistics, algebra and geometry as well as general and biological chemistry, cell biology, genetics, human anatomy and physiology, and human health and disease. Four hours of class per week.	2
SDE101	STRATEGIES FOR SUCCESS IN COLLEGE SDE101 provides strategies to transition to the college environment, introducing the Chatham community, culture, traditions, and additional relevant topics. All students with first-year standing, regardless of transfer or advanced standing credits, are required to enroll during their first semester. Gateway and transfer students with 12 or more credits are exempt.	1
SDE133	SHARP: SEXUAL HARASSMENT AND RAPE PREVENTION This self-defense course will utilize education and physical activity to help students recognize and deal with dangerous	1

Course Code	Course Information	Credits
	situations. Self-defense is a means of empowerment: through stretching, discussion of risk reduction strategies, and practice of self-defense techniques, students will learn how to defend themselves. This course fulfills a wellness course requirement.	
SDE138	<p>PEER EDUCATION TRAINING</p> <p>This course is designed to prepare students to participate in the Resident Advisor Program. Upon completion of course work, students are able to direct peer groups involved in various health and wellness topics and are prepared to conduct and assist with various residence life activities. Pass/fail grading only. Student must be a Resident Advisor to enroll in this course.</p>	3
SDE140	<p>PEER TUTOR TRAINING</p> <p>This course is designed to prepare students to be effective peer tutors. Through a combination of in-class and online course activities and discussion, tutors will learn best practices and troubleshooting strategies. Pass/fail grading only. Student must be in the Peer Tutor Program to enroll in this course.</p>	1
SDE301	<p>STRATEGIES FOR SUCCESS IN COLLEGE TRANSFER</p> <p>This is a one credit, pass/fail course designed to facilitate a successful transition for transfer students entering Chatham. Emphasis will be placed on academic success, personal growth and self-management, campus/community resources and involvement, as well as career preparation and college planning with the Chatham Plan.</p>	1
SDE310	<p>CAREER PREPARATION</p> <p>Career Preparation</p>	1
SDE493	INDEPENDENT STUDY	3

Course Code	Course Information	Credits
	Independent Study	
SSA490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	3
SSA498	TUTORIAL: SOCIAL SERVICE ADMINISTRATION	4
SSA499	TUTORIAL: SOCIAL SERVICE ADMINISTRATION	4
SSC101	<p>INTRODUCTION TO ANTHROPOLOGY</p> <p>This course introduces the concepts and functions of culture from an anthropological perspective. It offers toolkits for a lucid approach to the ways in which communities across the globe and throughout human history have opted to organize themselves in pursuit of survival, cooperation, prosperity, and meaningful lives.</p>	3
SSC121	<p>INTRODUCTION TO GENOCIDE STUDIES</p> <p>Through scholarship, survivor testimony, and film, this course</p>	3

Course Code	Course Information	Credits
	introduces the study of genocide, examines specific cases, and considers strategies to intervene before persecution escalates to genocide.	
SSC214	SPECIAL TOPICS Special Topics	3
SSC215	STATISTICAL ANALYSIS SOFTWARE This course introduces students to statistical analysis software and teaches them the basics of data entry, describing data, analyzing data, and reporting. Proficiency in statistical analysis software will help students prepare for research projects and a variety of graduate programs and careers.	1
SSC219	AMERICAN JEWISH EXPERIENCE This course surveys the experience of the Jewish community in America occasionally using Pittsburgh as a case study from the 19th century up through contemporary times. Events are placed in the context of political and social currents in America, Europe, and the Middle East.	3
SSC310	CAREER PREP-SOCIAL SCIENCES Students will research graduate programs and entry-level positions in their field, evaluate those programs and organizations, consider their strengths and credentials, and prepare application materials for them.	1
SUS100	SUSTAINABILITY SCIENCE Through the lens of the natural and cultural history of Eden Hall and its surroundings, students learn about cultural, social, economic, natural and other systems. The course will focus on land use over time, the economic and social drivers and	3

Course Code	Course Information	Credits
	impacts of those land uses, and the implications for environmental wellbeing.	
SUS102	<p>SUSTAINABILITY AND SOCIETY</p> <p>Students examine core concepts of sustainability, and explore its origins, history, and achievements across the globe at multiple scales. Students gain a foundation for more in-depth study of sustainability. Students also focus on their personal conception of sustainability and engage in a sustainability group project linked to community partners.</p>	3
SUS105	<p>SUSTAINABILITY: ISSUES TO ACTIONS</p> <p>Intended for all first-year undergraduate students, this course provides an overview of key sustainability principles. Through lectures, panels, and discussions, students will explore, analyze, and evaluate local sustainability and resilience issues with global relevance. The course captures the liberal arts outcomes and includes community service through civic engagement opportunities.</p>	3
SUS125	<p>LEADERSHIP IN SUSTAINABILITY</p> <p>Explore topics and careers in the sustainability field through experiential sessions at the Eden Hall Campus and around Pittsburgh. Develop a strategic project action plan that targets personal leadership goals and drives community transformation around complex problems. Topics include: green buildings, food systems, urban planning, social justice, energy, ecology, transportation.</p>	3
SUS132	<p>SUSTAINABLE TRAIL DEVELOPMENT: RESOURCE MANAGEMENT</p> <p>Students will learn the history, methods, and techniques of sustainable trail development and its importance in the context of resource management on public lands. Students will be</p>	3

Course Code	Course Information	Credits
	exposed to a variety of sustainable trail methodologies and through hands-on projects, will gain the skills necessary to become qualified trail crew leaders.	
SUS150	<p>FOOD, FARM & FIELD</p> <p>This course explores food, farm, and environment through readings, films, lectures, demonstrations, field trips, and on-farm and kitchen experiences in research and production problems. Activities include presentations on specific topics, group discussions, hands-on lab and field activities, individual and group presentations, field trips, and reflection through writing, video, and photography.</p>	1
SUS201	<p>INTEGRATIVE BIOLOGY</p> <p>This course will introduce traditional biological concepts from molecules to organisms within an integrative and applied framework. Students will learn the interdisciplinary nature and common approaches of biology through applied topics relevant to sustainability such as human and ecological health, freshwater and marine fisheries, energy sources, and climate dynamics.</p>	3
SUS201L	<p>INTEGRATIVE BIOLOGY LAB</p> <p>Laboratory exercises including data collection, small-scale experimentation, data modeling, and simulation will be experienced to complement the material covered in SUS 201. Two hours of laboratory will be held per week at the Eden Hall Campus aquatic science lab. Additional Fee(s): Laboratory fees = \$50.</p>	1
SUS202	<p>DYNAMIC EARTH SYSTEMS</p> <p>The earth is a dynamic, evolving system. This course provides an introduction to earth's formation, its materials composition</p>	3

Course Code	Course Information	Credits
	and distribution, and the processes of the lithosphere, atmosphere, hydrosphere, and biosphere that interact to shape surface and subsurface features and conditions. The complex adaptive systems framework will be applied.	
SUS203	<p>GLOBAL ENVIRONMENTAL HEALTH</p> <p>This course addresses the connection between health and environment. Topics include: environmental epidemiology, toxicology, policy, radiation and energy disease, and water, air, soil qualities. The work of scientists and public health specialists to discover, assess, and reduce risk to environment health problems are explored. Case studies provide context and background for environmental health issues past and present.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 4 courses:</p> <ul style="list-style-type: none"> • BIO144 : The Organism • SUS100 : Sustainable Systems • SUS100 : Sustainability Science • SUS201 : Integrative Biology 	3
SUS203W	<p>GLOBAL ENVIRONMENTAL HEALTH</p> <p>This course addresses the connection between health and environment. Topics include: environmental epidemiology, toxicology, policy, radiation and energy disease, and water, air, soil qualities. The work of scientists and public health specialists to discover, assess, and reduce risk to environment health problems are explored. Case studies provide context and background for environmental health issues past and present.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 4 courses:</p> <ul style="list-style-type: none"> • BIO144 : The Organism • SUS100 : Sustainable Systems • SUS100 : Sustainability Science • SUS201 : Integrative Biology 	3
SUS210	SUSTAINABILITY AND TECHNOLOGY	3

Course Code	Course Information	Credits
	<p>This course discusses opportunities and challenges for using technology for sustainability. We will discuss innovation for sustainability and societal adoption, and will explore ways to use renewable energy and other technologies for homes and workplaces, the internet of Things, closed loops and new materials, sustainable transportation, and smart water systems.</p>	
SUS213	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
SUS301	<p>GLOBAL CHANGE SCIENCE</p> <p>The climate system of Earth is rapidly changing due to complex and interacting phenomena. This course offers an in-depth investigation of the science behind climate change, including a survey of model forecasts. Emphasis will also include the current and projected consequences of climate change on natural resources.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • ENV116 : Global Environmental Challenges • SUS202 : Dynamic Earth Systems 	3
SUS302	<p>SOCIAL JUSTICE AND SUSTAINABILITY</p> <p>This course focuses on social justice and sustainability. We examine environmental risks and benefits as they are unequally distributed in society. We look especially at environmental problems in relation to social constructs such as gender, race, ethnicity, and class. We will also focus on solutions and responses to these problems.</p>	3
SUS302W	<p>SOCIAL JUSTICE AND SUSTAINABILITY</p> <p>This course focuses on social justice and sustainability. We examine environmental risks and benefits as they are unequally</p>	3

Course Code	Course Information	Credits
	distributed in society. We look especially at environmental problems in relation to social constructs such as gender, race, ethnicity, and class. We will also focus on solutions and responses to these problems.	
SUS304	ENVIRONMENT AND CULTURE This course considers "culture" and "environment" and how these concepts both help and hinder efforts towards a sustainable and healthy world. Topics include: socio-cultural ways of knowing and reasoning, human adaptation, engagements with food, animals and places, and why race, class, and gender are critical to conversations about sustainability.	3
SUS305	ENVIRONMENTAL TOXICOLOGY To be determined	3
SUS306W	EQUITABLE COMMUNITY DEVELOPMENT This class introduces community development theory, history, and practice through an equity lens. We explore the roots of racial inequities and the role of urban planning in perpetuating inequities. Students assess case studies and learn how to support equitable development, including through housing, social capital, the arts, and local economies.	3
SUS315	FOOD ACCESS AND POLICY If food is a basic human right, how do societies create universal access to food? This course explores the ethical basis for making citizens food secure despite global inequality. Major topics include private vs public solutions and the relationship between food access, gender, cultural appropriateness, nutrition, sustainability, and justice.	3

Course Code	Course Information	Credits
SUS322	<p>NATURAL RESOURCE MANAGEMENT POLICY AND LAW</p> <p>Contemporary natural resource management policy issues are addressed emphasizing domestic policy solutions. Major initiatives and implementation toward sustainable resource use and healthy environments are discussed and analyzed to determine implementation strategy success levels, to assess adequacy within bioregional/ecosystem approaches, and to integrate economic and environmental decisions. Local site visit(s) expected.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • SUS102 : Foundations of Sustainability • SUS102 : Sustainability and Society 	3
SUS327W	<p>WRITING ABOUT ENVIRONMENTAL SCIENCE</p> <p>This course is designed for students with some basic scientific skills, who might become scientists professionally, but all of whom will be communicating about science, often to non-scientists. In this course, we will read, discuss, and practice a variety of methods of communicating about environmental science, from popular culture to news to government reports. Students will competently translate scientific results into written journalistic English and will be able to evaluate scientific results from the news in terms of its scientific accuracy and clarity. Cross-listed as ENV327W.</p>	3
SUS330	<p>SUSTAINABLE CITIES</p> <p>This course will explore sustainability with a focus on the urban built environment. We will investigate both American and international issues of landownership, neighborhood development, housing, public spaces, and building technology. The course will incorporate lectures, readings, site visits, case studies, and a project using Pittsburgh as an investigatory vehicle.</p>	3

Course Code	Course Information	Credits
SUS335	<p>RENEWABLE ENERGY AND SOCIETY</p> <p>This course explores the relationship of energy production and consumption with sustainability. Non-renewable and renewable energy resources and their environmental and social impacts will be discussed. We will explore the Eden Hall energy systems and investigate in more detail how solar energy could be used on a larger scale.</p>	3
SUS350	<p>SKILLS FOR SUSTAINABILITY PROFESSIONALS</p> <p>This course promotes professional skills development for careers in the field of sustainability including career exploration, networking, job searching, application materials, and interviewing skills. Other topics include practical skills for presentations and small project recognition and development.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 : Integrative Biology 	2
SUS352	<p>GIS SOFTWARE - SKILLS AND APPLICATIONS</p> <p>A Geographic Information Systems (GIS) software is a powerful tool used in a variety of disciplines. Students will gain a foundation of GIS principles and applications using ArcGIS software. Topics covered include data development and management, spatial analysis techniques, communicating data visually and examples of hands-on GIS applications.</p>	3
SUS355	<p>FORESTRY</p> <p>This course introduces forest ecosystems around the world, explores their ecology and management, and examines the practical and economic aspects of forestry. Topics include tree growth strategies, successional change, nutrient cycling, silviculture, timber harvesting, and human-induced stressors. Tree ID and field methods will be taught in the Eden Hall</p>	3

Course Code	Course Information	Credits
	woodland.	
SUS380	<p>ECONOMICS IN A CHANGING WORLD</p> <p>An interdisciplinary approach to economics including concepts from sociology, politics, behavioral and evolutionary economics. It explores the limits of conventional economics in explaining and predicting economic phenomena. It situates economics as a behavioral science and looks at economic sustainability at the local, to global scale, incorporating social and political issues.</p> <p>Pre-Requisites:</p> <p>Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> <li>• SUS102 : Foundations of Sustainability <li>• SUS102 : Sustainability and Society 	3
SUS401	<p>SUSTAINABILITY POLICY AND DECISION MAKING</p> <p>This course examines contrasting rationales supporting environmental values and human interests that compete against those values; the enactment and mechanics of regulations and statutes; environmental economics and politics. The socio-economic, legal and political implications will be scrutinized through case studies of local and/or global environmental and ecological concern.</p>	3
SUS403	<p>SUSTAINABLE FOOD SYSTEMS</p> <p>This course explores the sustainability of food and agricultural systems from the local to the global level, focusing on economic, social, ethical, and environmental factors. It also explores the roles of food access and culture, sustainable production at various scales, and the development of resources to support sustainable food systems.</p>	3
SUS404	<p>QUANTITATIVE ECOLOGY</p> <p>Drawing from case studies in landscape design and natural resource management, this course will apply quantitative</p>	3

Course Code	Course Information	Credits
	<p>methods to ecological data analysis. Students will work with the software program R to apply statistical inference and mathematical modeling using previously collected data sets on single species, species interactions, communities, and food webs.</p>	
SUS404L	<p>QUANTITATIVE ECOLOGY LABORATORY</p> <p>Laboratory exercises from this course will complement material covered in SUS 404. Activities will primarily involve data collection and retrieval in ecosystems surrounding Eden Hall and in the Laurel Highlands. Additional fees: \$50 laboratory fee.</p> <p>Co-Requisites:</p> <ul style="list-style-type: none"> • SUS404 : Quantitative Ecology 	1
SUS406	<p>ENVIRONMENTAL POLICY</p> <p>This course addresses water policy, management, and sustainability. We will consider water resources with specific attention to the challenges that come with managing a resource that crosses a range of boundaries and scales. Topics include U.S. water policy, water privatization, water resources in the global south, infrastructure and climate change.</p>	3
SUS407	<p>NATURAL RESOURCE LEADERSHIP</p> <p>This course addresses topical environmental challenges (e.g.. water) and develops sustainable, leadership-based skills for managing these challenges. Students will learn about the social, ecological, and economic aspects of the topic, and then apply their knowledge to field experiences. Field experiences include service projects, fieldwork, or training.</p>	3
SUS416	<p>SUSTAINABLE DECISION ANALYSIS</p> <p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to</p>	3

Course Code	Course Information	Credits
	<p>sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>	
SUS421	<p>ECOTOXICOLOGY & ENVIRONMENTAL HEALTH</p> <p>Human health is intimately connected to environmental conditions and ecosystem integrity. Introducing concepts and measures of ecosystem and human health, this course covers the principles and practice of contributing fields including ecotoxicology, epidemiology, environmental health and risk assessment. Students will move from inquiry to action for key issues.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • BIO118 : Environmental Health Issues 	3
SUS426	<p>SUSTAINABLE AQUACULTURE</p> <p>This course examines the historical development and cultural importance of aquaculture, as well as practical considerations for managing modern aquaculture systems. Emphasis is on low-impact aquaculture systems and approaches, which minimize adverse environmental impacts, and encourage socially responsible development that enhances both the natural resource base and community livelihoods.</p>	3
SUS435	<p>GREEN AND SOCIAL INNOVATION</p> <p>Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.</p>	3

Course Code	Course Information	Credits
SUS435W	GREEN AND SOCIAL INNOVATION	3
	<p>Students will develop skills for managing innovation to positively impact the environment and society. Students work with actual ideas and/or entrepreneurs using Eden Hall to test products. The class focuses on helping students to develop product management skills which use innovation to solve major social and environmental problems.</p>	
SUS436	SUSTAINABLE ENERGY APPLICATIONS	3
	<p>This class explores the energy service sector and integration of renewable energy into the energy system. Topics include strategies for electric utilities in today's changing environment, community energy systems and micro-grids, the role of renewable energy for business strategies, energy services, and energy deficiency and storage.</p>	
	<p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • BUS243 : Principles of Marketing • BUS310W : Business Analytics: Research Methods • SUS335 : Renewable Energy and Society 	
SUS460	ENERGY POLICY FOR SUSTAINABILITY	3
	<p>This course explores the history, challenges, and opportunities of energy policy. Policymakers must consider disruptive innovations, volatile markets, climate change, and economic instability while balancing diverse goals collaboratively and holistically. The course equips students with tools and considerations to craft sustainable energy policy for reliable and affordable energy systems.</p>	
	<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • POL101 : American Government and Public Policy • SUS335 : Renewable Energy and Society 	

Course Code	Course Information	Credits
SUS461	<p>AQUATIC ENTOMOLOGY</p> <p>Aquatic environments harbor a vast number of insect species that are widely used as biological indicators of environmental health. This course introduces the physiological, ecological, and biomonitoring attributes of aquatic insects and emphasizes taxonomic identification. Preparation for a formal identification certification test from the Society for Freshwater Science is optional.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS201 : Integrative Biology <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism 	3
SUS461L	<p>AQUATIC ENTOMOLOGY LABORATORY</p> <p>Aquatic environments harbor a vast number of insect species that are widely used as biological indicators of environmental health. This laboratory section complements the course introducing the physiological, ecological, and biomonitoring attributes of aquatic insects. Laboratory assignments will emphasize taxonomic identification and sampling techniques.</p> <p>Pre-Requisites:</p> <p>Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • BIO143 : The Cell • BIO144 : The Organism <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS202 : Dynamic Earth Systems 	1
SUS470	<p>CORPORATE SOCIAL RESPONSIBILITY (CSR)</p> <p>This course helps students to understand the roles and responsibilities of organizations beyond just making an economic profit. Students are exposed to approaches to managing CSR. CSR is explored as a way for organizations to create value, thus, CSR is seen as crucial for business success in the 21st century.</p>	3

Course Code	Course Information	Credits
SUS490	<p>INTEGRATIVE CAPSTONE</p> <p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p>	3
SUS491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
SUS492	<p>INDEPENDENT STUDY</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
SUS493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
SUS502	<p>SUSTAINABILITY AND SYSTEMS</p> <p>In this course, students will develop skills necessary to</p>	3

Course Code	Course Information	Credits
	<p>understand, describe, and communicate complex systems. Working from examples, exercise and interactive discussions, students will learn to identify key drivers and leverage points for change. Students will learn to solicit useful information, model, and enact change using a various systems-based tools.</p>	
SUS504	<p>FOUNDATIONS OF SUSTAINABILITY</p> <p>This course provides students the skills to understand, communicate, and critique the fundamentals of sustainability at multiple scales and across disciplines and cultures. It explores sustainability's origins and foundations, application, and assessment. We evaluate the inter-relationships among environmental, societal, and economic well-being and the implications on individual and social decision-making.</p>	3
SUS506	<p>SUSTAINABILITY & POLICY: WATER</p> <p>This course addresses water policy, management, and sustainability. We will consider water resources with specific attention to the challenges that come with managing a resource that crosses a range of boundaries and scales. Topics include U.S. water policy, water privatization, water resources in the global south, infrastructure and climate change.</p>	3
SUS507	<p>NATURAL RESOURCE LEADERSHIP</p> <p>This course addresses topical environmental challenges (e.g.. water) and develops sustainable, leadership-based skills for managing these challenges. Students will learn about the social, ecological, and economic aspects of the topic, and then apply their knowledge to field experiences. Field experiences include service projects, fieldwork, or training.</p>	3
SUS508	<p>ENVIRONMENTAL STATISTICS</p> <p>Students in this course will become proficient in executing quantitative methods pertinent sustainability science, including</p>	3

Course Code	Course Information	Credits
	multiple linear regression, descriptive multivariate statistics, and time series analyses. All assignments aim to generate experience with applied problem-solving and will require scriptwriting in program R to maximize analytical and data management efficiency. This course requires a foundation in statistical methods.	
SUS510	PURSUING SUSTAINABILITY THROUGH GOVERNANCE Overcoming sustainability challenges requires influencing human behavior. In this course, we explore ways in which policy can shape behavior and draw insights from fields like political science, psychology, economics, the philosophy of justice, and science and technology studies to enhance our ability to understand, cultivate, and realize sustainability goals.	3
SUS511	PROJECT DESIGN, METHODS, AND EVALUATIONS	3
SUS512	SUSTAINABILITY IN PITTSBURGH Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". This course will provide a brief socio-ecological history then will visit various places and people that highlight the diversity in how Pittsburgh is striving to become a model of a sustainable city.	3
SUS512A	SUSTAINABILITY IN PITTSBURGH Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". Students will engage in 7 weekly workshops and guest lectures with introducing them to the city's history, key sustainability initiatives and job prospects. Students will provide 7 weekly blogs, one for each visit.	1

Course Code	Course Information	Credits
SUS512B	<p>SUSTAINABILITY IN PITTSBURGH</p> <p>Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". Students will engage in 10 weekly field trips with participant observation giving a glimpse of the socio-ecological history of the city. Students will provide 10 blogs, one for each visit, and a final paper.</p>	2
SUS512C	<p>SUSTAINABILITY IN PITTSBURGH</p> <p>Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance". Students will engage in 14 weekly field trips with participant observation giving a glimpse of the socio-ecological history of the city. Students will provide a 14 blogs one or each visit, and a final paper.</p>	3
SUS514	<p>BUILDING SUSTAINABLE AND RESILIENT CITIES</p> <p>Today's cities can thrive by becoming more sustainable, walkable, climate-resilient and restoring urban ecosystems. Cities also face a shrinking middle class and communities that are disproportionately affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.</p>	3
SUS516	<p>SUSTAINABLE DECISION ANALYSIS</p> <p>The class contributes to a foundation for sustainability management by exploring different quantitative approaches to sustainable decision-making including: Life Cycle Analysis, Ecosystem Services Valuation, Carbon and Water Foot printing, and DPSIR (Drivers, Pressures, States, Impacts and Responses) Society-Environment interaction framework. Finally, the class explores how quantitative decision-making is shaped by various stakeholders.</p>	3

Course Code	Course Information	Credits
SUS517	<p>CLIMATE CHANGE AND SUSTAINABILITY</p> <p>Climate change is one of today's most critical issues. We will study the science of climate change impacts and examine frameworks used by the global community to develop climate projections, build resiliency, and mitigate emissions. Through team projects we investigate topics in climate resiliency or emissions reduction in more depth.</p>	3
SUS520	<p>COMMUNITY ENERGY SYSTEMS</p> <p>This class examines community energy systems using the examples of Eden Hall, national and international case studies, and a class project. Technical applications include estimating energy production, heating and cooling, and building energy efficiency. We discuss energy access and energy justice, relevant state policy, and organizing and financing community energy.</p>	3
SUS521	<p>ECOTOXICOLOGY AND ENVIRONMENTAL HEALTH</p> <p>Human health is intimately connected to environmental conditions and ecosystem integrity. Introducing concepts and measures of ecosystem and human health, this course will cover the principles and practice of contributing fields including ecotoxicology, epidemiology, environmental health and risk assessment. Students will be led from inquiry to action for key issues.</p>	3
SUS526	<p>SUSTAINABLE AQUACULTURE</p> <p>This course examines the historical development and cultural importance of aquaculture, as well as practical considerations for managing modern aquaculture systems. Emphasis will lie on low impact aquaculture systems and approaches, which minimize adverse environmental impacts, and encourage</p>	3

Course Code	Course Information	Credits
	socially responsible development that enhances both the natural resource base and community livelihoods.	
SUS550	<p>EDEN HALL EXPERIENCE</p> <p>This course provides an opportunity for students to engage Chatham faculty and staff, community members, and contractors and designers on topics related to the development and maintenance of the Eden Hall campus. It allows students an inside look at the first sustainable campus built in the United States from the ground-up. This is a unique opportunity for students to be involved in understanding and contributing to the process of building and maintaining a sustainable campus.</p>	3
SUS551	<p>EDEN HALL EXPERIENCE: DIGITAL STORYTELLING</p> <p>This course allows students to engage Chatham faculty/staff, local community members, contractors, and designers on topics related to the development and maintenance of the Eden Hall campus. It is a unique opportunity for students to be involved in understanding this sustainable campus, and helping to shape and promote it.</p>	2
SUS562	<p>ECONOMICS OF THE ENVIRONMENT</p> <p>This course is designed to introduce you to how economists think about the environment. The theory of externalities and market failure provide the basis for applying microeconomic concepts to the study of environmental issues. Analytical tools, particularly cost-benefit analysis, are explained and applied to problems with environmental dimensions.</p>	3
SUS580	<p>SUSTAINABLE BEHAVIOR CHANGE</p> <p>This hybrid course combines classroom and online instruction with real-world application. Students learn the latest science concerning sources of environmental degradation. In teams, students apply motivational theory, collect secondary and</p>	3

Course Code	Course Information	Credits
	primary data, and develop an action plan for increasing pro-environmental behaviors (PEB) in a specific context.	
SUS581	<p>ENTREPRENEURIAL ALTERNATIVES</p> <p>The class examines alternative paths to entrepreneurship for students interested in owning and operating an existing business. There is an emphasis on food-related businesses (production/processing, distribution, retail). Students will learn about acquiring an existing business or franchise. Skills covered include selecting targets, evaluation, appropriate financial valuation, deal structuring, arranging financing and post-closing operations planning.</p>	3
SUS590	<p>CAREERS IN SUSTAINABILITY</p> <p>This is a graduate level course that will contribute to the mission of SSE in training students in the theories, applications, and assessment of sustainability in a broad range of contexts.</p>	3
SUS591	<p>INDEPENDENT STUDY</p> <p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
SUS592	<p>INDEPENDENT STUDY</p> <p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
SUS593	<p>INDEPENDENT STUDY</p>	3

Course Code	Course Information	Credits
SUS601	<p>Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor <p>APPLIED ECOLOGY</p> <p>The overall goal of this course is to examine the role that ecological science contributes to sustainability. Students will critically assess, process evidence, and enhance communication skills for scientific methods. All topics and applications considered will be centered on issues of sustainability in the ecological sciences, such as climate change, water pollution, land use change, and the loss of biodiversity.</p>	3
SUS602	<p>THE POLITICAL ECONOMY OF SUSTAINABILITY</p> <p>This course will examine the economic dimensions of environmental change through the frameworks of political ecology, political economy, development studies, and sustainability. Through case studies and current theory, we will investigate the costs, benefits, and sustainability of environmental governance.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • SUS502 : Sustainability and Systems <p>Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • SUS501 : Fundamentals of Sustainability • SUS503 : Understanding Knowledge Across the Disciplines • SUS504 : Foundations of Sustainability 	3
SUS603	<p>SUSTAINABILITY: ETHICS, EQUITY, JUSTICE</p> <p>This course focuses on the role of the "social" as one of the three pillars of sustainability. It explores historic and contemporary notions of ethics, social equity and social justice.</p>	3

Course Code	Course Information	Credits
	<p>It examines how these concepts can be applied to sustainability by studying local and global case studies.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • SUS501 : Fundamentals of Sustainability • SUS503 : Understanding Knowledge Across the Disciplines • SUS504 : Introduction to Sustainability and Systems 	
SUS605	<p>LEADERSHIP FOR TRANSITIONS TO SUSTAINABILITY</p> <p>This class builds a foundation for sustainability management through exploration of Transition Management, a methodology for sustainable innovation. Students study innovation management, learn steps in managing a transition through analyzing systemic socio-technical problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.</p>	3
SUS606	<p>URBAN PLANNING AND POLITICAL ECOLOGY</p> <p>This course explores urban processes through the field of planning and a critical look at human/environment relationships in cities. Students will advance their knowledge of cities and how they function through in depth readings of governance, urban ecology, urban political ecology, food, infrastructure, policy, and inequality in metropolitan areas.</p>	3
SUS607	<p>APPLIED GREEN AND SOCIAL INNOVATION</p> <p>The class helps students develop skills for managing innovation focusing on Food, Agriculture, Environmental and Social Product and Service innovations. Students will work with actual ideas and or start-ups from local incubators and entrepreneurs. The class focuses on helping students to develop skills to use innovations for solving major social and environmental problems.</p>	3

Course Code	Course Information	Credits
SUS611	<p>DECISION MAKING UNDER UNCERTAINTY</p> <p>The application of design principles to data provides a bridge between the increasing volume of information that we encounter everyday to evidence-based, decision-making toward sustainable systems. This course provides a hands-on introduction to data analysis, data visualization techniques, and software for translating complexity and uncertainty into useful products.</p>	3
SUS617	<p>SUSTAINABLE ENERGY SYSTEMS</p> <p>This course explores the relationship of energy production and consumption with sustainability. We investigate environmental and climate impacts, renewable energy technologies and the integration of renewables into the grid given the ongoing restructuring of US electricity markets and new options such as large-scale solar networks, micro-grids and community solar.</p>	3
SUS617	<p>PATHWAYS TO A RENEWABLE FUTURE</p> <p>This course critically explores requirements and opportunities for transitioning all sectors -- residential, commercial, transport, industry -- to a fully renewable energy system. We investigate different energy technologies and the integration of renewables into the grid given electricity market restructuring and emerging options such as large-scale solar networks, micro-grids, and community solar.</p>	3
SUS619	<p>THE WATER'S EDGE: SCIENCE AND POLICY FROM SUMMIT TO SEA</p> <p>The water's edge is rich with ecological and cultural activity. Through online discussions, field excursions, public service, participation in research, interactions with practitioners, and a curated exhibit, this course bridges theory with application for the science and policy relevant to the aquatic-terrestrial interface (e.g., streams, rivers, lakes, and coastal shorelines).</p>	3

Course Code	Course Information	Credits
<p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • SUS501 : Fundamentals of Sustainability • SUS502 : Sustainability and Systems 		
SUS621	<p>APPLIED METHODS</p> <p>This skill-based course conveys specific qualitative, quantitative, or mixed methods for conducting the systematic investigation of a business, client project, practical problem, or applied research situation. Each section will address a different method; examples of topics include GPS and mapping, introduction to statistics, surveys, sustainability audits, and water quality monitoring.</p>	2
SUS621	<p>THE CRAFT OF RESEARCH</p> <p>This class introduces students to evidence-based research in sustainability guiding them through the challenges. Topics include the role and limits of research, the skill of connecting with your readership, developing well-defined and appropriately scaled research questions/problems, identifying and assessing source material and methodologies, and constructing well-supported arguments and evidence.</p>	1
SUS622	<p>ENGAGING ANIMALS</p> <p>This course considers human-other animal engagements and how these affect sustainability. We first make sense of what "engaging animals" means, focusing on human-animal relations at different scales and levels cross-culturally, and then consider the impact on sustainability. We end with a student-led symposium on a specific human-animal relationship in relation to sustainability.</p>	3
SUS625	<p>RESTORATIVE ENVIRONMENTAL JUSTICE</p> <p>This course analyzes the environmental justice movement</p>	3

Course Code	Course Information	Credits
	<p>around the world. It draws lessons from the conditions that have led to environmental injustices, the historical development of the movement, the policy responses of governments and international agencies, the solutions pursued by communities, and the role played by the private sector. The course explores the role of natural asset-building strategies that simultaneously reduce poverty and address environmental issues.</p>	
SUS640	<p>SUSTAINABLE COMMUNITY DEVELOPMENT</p> <p>This course explores how people can engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local to the regional. The reading and assignments emphasize sustainable planning theory and practice as well as sustainable food systems perspectives. Students will engage in practice-based research and community projects.</p> <p>Pre-Requisites: Complete any 1 of the following 3 courses:</p> <ul style="list-style-type: none"> • FST508 : Food Systems • FST509 : Food Access • SUS504 : Foundations of Sustainability 	3
SUS681	<p>SPECIAL TOPICS</p> <p>This course explores the role of "social justice" as one of the pillars of sustainability by integrating the concepts associated with it into a local community-based project. Students have an opportunity to pursue a project designed and implemented in conversation with a community partner that incorporates key components of environmental and social justice.</p>	1
SUS683	<p>SPECIAL TOPICS</p> <p>This course is designed to allow students to explore in depth a specific topic or area of sustainability.</p>	3

Course Code	Course Information	Credits
SUS691	<p>INTERNSHIP</p> <p>Internship</p>	1
SUS692	<p>INTERNSHIP</p> <p>Internship</p>	2
SUS693	<p>INTERNSHIP</p> <p>Internship</p>	3
SUS694	<p>RESEARCH METHODS IN CONTEXT</p> <p>This course assists students in the preparation of thesis by reviewing research methods and design. Students review research papers focusing on identifying how specific methods were used to collect and analyze data in order to answer the paper's research question. Guest researchers will present their work and explain their methods.</p>	1
SUS695	<p>THESIS OR CAPSTONE PROPOSAL DEVELOPMENT</p> <p>This course provides supervision and research guidance for the preparation of a quality thesis or capstone project proposal. All students are required to complete their proposals including committee sign-off to successfully pass the class. The course will be run in the seminar style with the program director or coordinator overseeing the class. The instructor will assure students to complete the MSUS final thesis/capstone proposal in accordance with the Thesis and Capstone manual with their identified committee chair.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • SUS621 : The Craft of Research • SUS694 : Research Methods in Context 	0

Course Code	Course Information	Credits
SUS696	SOLUTION BASED LEARNING I	2
	<p>As part of a team, first-year MSUS students work on a project or problem identified by the Falk School. Projects may be internal or external. Students play a supporting role learning good teamwork and drawing upon previous knowledge and courses to successfully complete or advance a project. Project outcomes are presented to the Falk School community and project sponsor.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • SUS621 : The Craft of Research • SUS694 : Research Methods in Context 	
SUS697	THESIS PRACTICUM	1
	<p>Course assists students in the preparation of thesis facilitating the transition from research and project development to writing. Includes a review of research methods and design, literature review, time management demands, project management, and presentation skills.</p>	
SUS697	SOLUTION BASED LEARNING II	2
	<p>In a leadership role, second-year MSUS students lead a project. Projects may be internal or external. Students play a supporting role learning leadership and drawing upon previous knowledge and courses to successfully complete or advance and project. Project outcomes are presented to the Falk School community and project sponsor.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SUS696 : Solution Based Learning I 	
SUS698A	FINAL PROJECT	1
	<p>Course provides supervision and research guidance for the final project. Students will complete a final project independently or</p>	

Course Code	Course Information	Credits
	<p>as part of a group to complete the MSUS degree requirements. The form of the final project is flexible and should be linked to the student's self-defined sustainability challenge. Part one of two.</p>	
SUS698C	<p>FINAL PROJECT</p> <p>Course provides supervision and research guidance for the final project. Students will complete a final project independently or as part of a group to complete the MSUS degree requirements. The form of the final project is flexible and should be linked to the student's self-defined sustainability challenge.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SUS695 : Thesis or Capstone Proposal Development 	3
SUS698II	<p>FINAL PROJECT II - PART TWO</p> <p>Course provides supervision and research guidance for the final project. Students will complete a final project independently or as part of a group to complete the MSUS degree requirements. The form of the final project is flexible and should be linked to the student's self-defined sustainability challenge. Part two of two.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • SUS698A : Final Project • SUS698C : Final Project 	1
SUS699	<p>ADVANCED SEMINAR IN SUSTAINABILITY</p> <p>In this course students in the final semester of the Master of Sustainability program revisit materials from the first semester of the program in the context of their projects, areas of focus, and summer placements.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • SUS601 : Applied Ecology 	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> SUS602 : The Political Economy of Sustainability 	
SUS699	<p>ADVANCED SEMINAR IN SUSTAINABILITY</p> <p>In this course students in the final semester of the Master of Sustainability program revisit materials from the first semester of the program in the context of their projects, areas of focus, and summer placements.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> SUS601 : Applied Ecology SUS602 : The Political Economy of Sustainability 	3
SUS800	<p>GRADUATE CONTINUING CREDIT</p> <p>Graduate Continuing Credit</p>	1
SWK101	<p>INTRODUCTION TO SOCIOLOGY</p> <p>This course introduces students to the basic sociological concepts, including sociological imagination, socialization, social institutions, social stratification, and social inequality. Emphasis is placed on conceptual tools necessary for the analysis of the influence of social structures on human behavior and life chances.</p>	3
SWK102	<p>INTRODUCTION TO SOCIAL WORK, SOCIAL JUSTICE AND SOCIAL ISSUES</p> <p>This course examines selected social issues as well as related social welfare policies and programs. It introduces the profession of social work, key aspects of the professional knowledge base, fields of practice, and populations served by social workers. This course is appropriate for students who are considering social work as a profession and as well as for those with an interest in related fields such as psychology, counseling, and public policy.</p>	3

Course Code	Course Information	Credits
SWK103	RESILIENCY IN ACADEMIC AND PROFESSIONAL ROLES The purpose of this course is to teach skills for developing behavioral strategies that focus on resilience. Research has shown that individuals who develop and use resilience strategies and emotion regulation behavior skills as well as build positive behavioral routines are more likely to be effective in their job roles.	1
SWK164	DIVERSITY IN HEALTH AND ILLNESS This course will examine the impact of culture on health care services and delivery in the United States. The influence of cultural difference on patient/provider interactions will be considered within the cultural competency model. The context of health and illness for groups including African-Americans, Asian-Americans, and Latin-Americans will be included.	3
SWK201W	HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I This course examines the development of individuals, couples, and families from birth to death within the framework of relevant biological, psychological, sociological, and social work research and theory. Pre-Requisites: Complete the following course: • PSY101 : General Psychology	3
SWK202	HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT II This course is a continuation of SWK 201W. It examines the development of individuals, couples, and families from adolescence to death within social work research and theory. Also explored are systems that influence gender, race, ethnicity, social, and economic influences within the context of families, groups, organizations, institutions, and communities.	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SWK201W : Human Behavior in the Social Environment I 	
SWK224	<p>JUVENILE JUSTICE</p> <p>Examination of biological, psychological, sociological, and ecological theories of juvenile delinquency; its historical and current legal definitions and enabling legislation; statistical resources and activity patterns; and methods of prevention, control, and treatment of juvenile delinquency. Cross-listed as CRM 224.</p>	3
SWK321	<p>SOCIAL WELFARE AND SOCIAL JUSTICE</p> <p>This course examines the history, development, context, and current status of the American social welfare system. The American system is compared with policies and programs in other countries. The specifics of major welfare programs such as Social Security and Temporary Aid to Needy Families are explored.</p>	3
SWK322W	<p>SOCIAL WELFARE: WOMEN AND POLICY</p> <p>This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.</p>	3
SWK325	<p>DEVIANT BEHAVIOR</p> <p>This course examines deviance using biological, psychological, and sociological perspectives. Emphasis is placed on examining the influence of social, cultural, historical, political, and economic context in the identification, labeling, and control of deviant behavior.</p>	3

Course Code	Course Information	Credits
	<p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SWK101 : Introduction to Sociology 	
SWK351	<p>INTERVIEWING AND ASSESSMENT WITH INDIVIDUALS</p> <p>This course introduces generalist social work practice, including its philosophy, domains, and values. The role of the practitioner and an overview of the helping process provide the foundation for the study and practice of basic interviewing skills.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 : Introduction to Social Work, Social Justice and Social Issues 	3
SWK352	<p>INTERVENTIONS WITH INDIVIDUALS AND FAMILIES</p> <p>Building on the knowledge and skills acquired in Social Work 351, this course focuses on direct practice with individuals and families, including the assessment, middle, and termination phases of social work practice. Skills for working with diverse populations will be illustrated and practiced using videos and role playing.</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 : Introduction to Social Work, Social Justice and Social Issues 	3
SWK354	<p>WORKING WITH GROUPS</p> <p>This course examines the essential components of generalist social work practice with groups. Topics include group typology, formation, development, and processes. Strategies for effective leadership with small and large groups are explored using both didactic and experiential methods.</p> <p>Pre-Requisites: Complete the following course:</p>	3

Course Code	Course Information	Credits
	<ul style="list-style-type: none"> • SWK102 : Introduction to Social Work, Social Justice and Social Issues 	
SWK355	<p>WORKING WITH ORGANIZATIONS AND COMMUNITIES</p> <p>The focus of this course is generalist social work practice as applied to macro practice activities. It introduces students to generalist social work practice intended to bring changes to organizations, communities, and institutions with the goal of advancing the achievement of individual and collective social and economic justice.</p> <p>Pre-Requisites:</p> <p>Complete the following course:</p> <ul style="list-style-type: none"> • SWK102 : Introduction to Social Work, Social Justice and Social Issues 	3
SWK377	<p>SPECIAL TOPICS</p> <p>Special Topics</p>	3
SWK451A	<p>FIELD PLACEMENT I</p> <p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-Requisites:</p> <p>Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 : Interventions with Individuals and Families • SWK354 : Working with Groups • SWK355 : Working with Organizations and Communities 	1
SWK451B	<p>FIELD PLACEMENT II</p> <p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well</p>	2

Course Code	Course Information	Credits
	<p>as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 : Interventions with Individuals and Families • SWK354 : Working with Groups • SWK355 : Working with Organizations and Communities 	
SWK451C	<p>FIELD PLACEMENT III</p> <p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 : Interventions with Individuals and Families • SWK354 : Working with Groups • SWK355 : Working with Organizations and Communities 	3
SWK451D	<p>FIELD PLACEMENT IV</p> <p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 : Interventions with Individuals and Families • SWK354 : Working with Groups • SWK355 : Working with Organizations and Communities 	4
SWK451E	<p>FIELD PLACEMENT V</p> <p>Students participate in a practice experience with the opportunity to apply social work knowledge, ethics, and practice</p>	5

Course Code	Course Information	Credits
	<p>skills. Students work closely with their field instructors, as well as meeting weekly with social work faculty. Students must complete a total of 12 credits of field placement.</p> <p>Pre-Requisites: Complete all 3 of the following courses:</p> <ul style="list-style-type: none"> • SWK352 : Interventions with Individuals and Families • SWK354 : Working with Groups • SWK355 : Working with Organizations and Communities 	
SWK461	INTEGRATIVE SEMINAR IN SOCIAL WORK II	2
	<p>The capstone course of the social work program, this seminar requires students to synthesize and integrate their professional knowledge with field experience. Topics include ethics, professional practice, critical thinking, and integration of research in practice, and career development. Co-requisite: Field placement.</p>	
SWK490	INTEGRATIVE CAPSTONE	3
	<p>The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs.</p> <p>Pre-Requisites: Complete all 2 of the following courses:</p> <ul style="list-style-type: none"> • PSY213 : Statistics and Research Design • PSY314W : Foundations of Behavioral Research 	
SWK491	INDEPENDENT STUDY	1

Course Code	Course Information	Credits
	<p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	
SWK492	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	2
SWK493	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	3
SWK494	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	4
SWK498	TUTORIAL: SOCIAL WORK	4
SWK499	TUTORIAL: SOCIAL WORK	4
THT141	<p>ACTING ONE</p> <p>Through warmups, games, exercises, and text, students develop their physical, vocal, and emotional creativity. Students build on vocal and physical fundamentals through performance of contemporary texts. They are introduced to modern drama, develop skills for character analysis, acquire basic vocabulary,</p>	3

Course Code	Course Information	Credits
	and evaluate professional performances. Additional Fee(s): Additional Art Fee	
THT147	<p>STAGE CRAFT</p> <p>This survey course is an introduction to the elements of technical theatre, including scenery, properties, costumes, lighting, sound, and stage management. Through this course, students will be exposed to hands-on training in a variety of areas. Student projects for this course may be used in various productions. Additional Fee(s): Additional Art Fee (\$20)</p>	3
THT149	<p>PLAY PERFORMANCE</p> <p>This course is an introduction to conceptualization and creation of theatrical productions. Theory and analysis of structure, elements, and styles of drama from the written script are coupled with practical techniques to realize a unified vision on stage. Concepts integral to directing, dramaturgy, design, character development, and playwriting are explored.</p>	3
THT231	<p>ACTING TWO</p> <p>This course examines texts and modalities outside of traditional modern drama. Students focus on physicalized practices, exploratory vocal technique, and textual investigation and development. They analyze professional productions within the given framework. The class culminates in a theatre piece created and performed by the students in collaboration with Directing students.</p>	3
THT240	<p>SPECIAL TOPICS</p> <p>Students explore in depth a specific area of technical theatre. Topics will vary each semester and may include scene painting, stage management, construction techniques, and prop makeup and costume design.</p>	3

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THT241	<p>HISTORY OF DRAMA</p> <p>Students study the trajectory of drama throughout time and across the world. They explore the historical contexts of seminal texts, playwrights, theatre practitioners, and theatrical movements. Students will also put texts into action as actors, directors, and dramaturgs, conceptualize productions, and analyze professional work. Additional Fee</p>	3
THT245	<p>SCENE WORK FOR THE STAGE</p> <p>Students develop techniques for the proper preparation of a role through disciplined rehearsal and comprehensive character and script analysis. These techniques are applied to scene work and monologue preparation, encompassing both classical and contemporary dramatic literature. Prerequisite(s): THT 141 and permission of the instructor.</p>	3
THT260	<p>THEATRE PRODUCTION LAB</p> <p>This course is a practicum for producing Chatham's undergraduate drama productions. Production processes addressed: Preproduction, auditions, the rehearsal process, show production, and post production. In this course students gain experience and knowledge of the creative, technical, and professional aspects of working on a theatrical show.</p>	3
THT380	<p>ACTING FOR THE CAMERA</p> <p>This is a process class that will include intensive work in front of the camera. This course will cover the following: Film/TV/Stage acting differences; camera acting techniques; types of camera shots, studio and location disciplines; and the challenge of continuity.</p>	3
THT458	<p>DIRECTING</p>	4

Course Code	Course Information	Credits
	<p>THT458: Directing Students will develop skills in script analysis, dramaturgical research, the creation of stage imagery, and the practical considerations of casting, rehearsing and communicating within the process of creating a show. The course culminates in students directing a publicly performed one-act play. Additional Applied Fee (s): Applied Art Fee</p>	
THT491	<p>INDEPENDENT STUDY</p> <p>Independent Study</p> <p>Pre-Requisites: Complete the following course:</p> <ul style="list-style-type: none"> • XXX123 : Permission of Instructor 	1
VCD510	<p>VISUAL COMMUNICATION DESIGN: BRANDING</p> <p>This course offers a systematic approach to concept development and the problem-solving process applied to brand construction. Students build visual identities for a variety of organizations through generative design processes for communication goals. Particular attention is given to logo and type mark development, photography/illustration, use of the grid system, color story, typography and messaging.</p>	3
VCD520	<p>VISUAL COMMUNICATION DESIGN: TYPOGRAPHY</p> <p>This course examines the concrete and conceptual aspects of typography as a communications tool. Typographic history, anatomy of form, type specimens, and grid structures, serve as foundations for the intersections between form and meaning. Typographic projects will range from typographic compositional studies, expressive typography, to information-focused typographic design systems.</p>	3
VCD530	<p>PRINT DESIGN</p> <p>This course introduces students to the roles that graphic design</p>	3

Course Code	Course Information	Credits
	<p>plays in society as shapers of style and ritual within contexts of community and commerce. The class will work collaboratively in the development of concepts, process design, layout, scheduling, production and the construction, expense, and production of the print publication artifact.</p>	
VCD540	<p>HISTORY OF COMMUNICATION DESIGN</p> <p>To be determined</p>	3
VCD590	<p>MASTERS THESIS IN INTERDISCIPLINARY DESIGN: APPLIED</p> <p>This capstone course celebrates innovation, imagination, and creative solutions to design projects. The objective of this course is to enable students to synthesize design history and theory to demonstrate conceptual understanding of the aesthetic and technical aspects of design that combine inquiry, research, creative problem-solving, and design prototyping.</p>	3
VCD610	<p>GREEN GRAPHIC DESIGN</p> <p>Students will explore sustainable design within the context of graphic design. Through studio projects and exercises students will develop green graphic design standards: material/health selection, production techniques, eco-labeling/packaging, and green branding. Sustainable graphic design strategies while addressing environmental, social and cultural implications within core graphic design practices.</p>	3
VCD620	<p>DIGITAL ILLUSTRATION METHODS</p> <p>Digital illustration tools and methods are explored within the context of publication and branding. The contemporary illustrator becomes a conceptual interpreter of content through the potential mixing of primary graphic assets and secondary collected and manipulated graphic assets from digital archives and resources. Methods of information gathering are developed</p>	3

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	<p>from photography, library, and archival research. This course includes a foundation to Wacom drawing tablet capabilities. Processes and techniques from printmaking, painting, 2-D design, photography and drawing are mediated through digital software and hardware.</p>	
VCD630	<p>INFORMATION DESIGN</p> <p>This course examines the role of information design and how it serves society as a tool for communication and shaping agendas. Students apply dynamic solutions that utilize design fundamentals and methods of data visualization that address real world design solutions and operate as effective information tools.</p>	3
VCD650	<p>PORTFOLIO</p> <p>This course provides students with essential marketing principles and advanced desktop publishing skills to complete individual design portfolios. Analysis of professional portfolios and research of target firm's requirements are completed to establish a deliverable format. Using advanced tools in Adobe InDesign and other design applications, students learn how to implement their portfolios as both print and interactive formats. Topics such as selective content, innovative graphics, consistent layout, stylized copy, and creative packaging are covered. The portfolios created in this course are used to market individual talents to any sector of the design profession. Additional Fee(s): Course LAB Fee</p>	3
VCD670	<p>PACKAGE DESIGN</p> <p>Packaging design systems combines graphics, fundamentals of marketing and an understanding of form and structure. Packages are evaluated based on creative strategies developed from marketing positions. Individual brand identities are developed which include: naming, type, visual graphics, color schemes, and applied to various forms of packaging and</p>	3

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	extended lines. Packaging projects range from mass marketed food/beverage, electronic, and household sectors to luxury goods. Additional Fee(s): Course Computing LAB Fee	
VCD683	<p>SPECIAL TOPICS</p> <p>This course is designed to allow students to explore in depth a specific topic or area of visual communication design.</p>	3
WGS101	<p>INTRODUCTION TO WOMEN'S AND GENDER STUDIES</p> <p>Examines the role and status of women in society using a variety of disciplinary perspectives. Students will examine materials that present and challenge cultural assumptions of the nature and roles of women and consider diversity among women.</p>	3
WGS201W	<p>FEMINIST THEORY</p> <p>This course is designed to provide students with a critical introduction to the historical development and current controversies of feminist theory including global feminism and women's bodies as a site of contestation. It includes a comprehensive summary of the diverse and interdisciplinary philosophical strains that make up the intellectual heritage of modern feminism.</p> <p>Pre-Requisites: Complete any 1 of the following 4 courses:</p> <ul style="list-style-type: none"> • CST183 : Representations of Race and Gender • WGS101 : Introduction to Women's Studies • WGS101 : Introduction to Women's and Gender Studies • WST101 : Introduction to Women's Studies 	3
WGS202	<p>WOMEN'S LEADERSHIP IN THE 21ST CENTURY</p> <p>This interdisciplinary seminar provides a foundation in leadership theory and models, including women's diverse ways</p>	3

Course Code	Course Information	Credits
	<p>of leading; women's roles as leaders and agents of change; feminist leadership styles and agendas; and the impact of intersectional identities (such as race, ethnicity, sexuality, and religion and worldview) on leadership styles and agendas.</p> <p>Pre-Requisites: Complete any 1 of the following 2 courses:</p> <ul style="list-style-type: none"> • CST183 : Representations of Race and Gender • WGS101 : Introduction to Women's and Gender Studies 	
WGS210	<p>NARRATIVES OF GIRLHOOD: PERILS AND POSSIBILITIES</p> <p>Girlhood is a condition of precarity and potential. Through close study of multiple narratives and analyses, this course asks: How do intersectional identity categories impact girls' ability to navigate adolescence? What health and safety challenges do girls face? How might social institutions evolve to care for and empower girls?</p>	3
WGS322W	<p>SOCIAL WELFARE: WOMEN AND POLICY</p> <p>This course is designed to examine current issues and policies that impact the lives of women and to explore methods of creating or modifying policies. This course will utilize a comparative policy framework to explore the strengths and weaknesses of current interventions regarding their promotion of social and economic justice.</p>	3
WGS365	<p>GENDERED RESISTANCE, RIOTS, AND REBELLIONS</p> <p>This course explores gendered resistance to social, political, and economic inequalities from the twentieth century through the present. The class examines leaders and issues in both organized movements, as well as events often labeled as riots or rebellions, and considers how we understand different attempts to challenge systems of power.</p> <p>Pre-Requisites:</p>	3

Course Code	Course Information	Credits
	Complete any 1 of the following 2 courses: <ul style="list-style-type: none"> • ENG105 : First-Year Writing • WGS101 : Introduction to Women's and Gender Studies 	
WGS490	INTEGRATIVE CAPSTONE The integrative capstone, undertaken by the student during the senior year, is an extended project that helps the student complete their transition from an undergraduate student to a world-ready professional. The study usually centers on the student's major and may be conducted, at least in part, in the context of a group experience. Such programs are crafted to meet the unique needs of each major, and could include, for example, fieldwork, theater production, creative work in the arts, independent research, or independent readings. The integrative capstone in an interdisciplinary major must have the approval of both academic programs. Pre-Requisites: Complete the following course: <ul style="list-style-type: none"> • ENG350W : Seminar in Literary Theory and Scholarly Writing 	3