chatham UNIVERSITY

2025-2026

CATALOG

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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.

chatham UNIVERSITY

ABOUT CHATHAM

2025-2026

HISTORY OF CHATHAM

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

In 1890, Chatham's name was changed to Pennsylvania College for Women. In 1955, it 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 from its historic undergraduate women's college by offering 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 unequaled in its history: the Eden Hall Farm 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. In 2012, Chatham broke ground on 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, along with the existing Pennsylvania Center for Women and Politics, and Center for Women's Entrepreneurship.

From 2014 to 2024, Chatham was one of the fastest-growing colleges in Pennsylvania, with undergraduate enrollment more than doubling. Today, Chatham has over 2,400 students enrolled in bachelor's, master's, or doctoral programs in the College of Arts & Sciences, College of Health Sciences, School of Business & Enterprise, and the Falk School of Sustainability & Environment.

UNIVERSITY MISSION

Chatham University prepares students to lead lives of purpose, meaning and fulfilling work. Through a combination of liberal arts and professional skills building, and close engagement between students, faculty and staff, Chatham teaches its graduates to be informed and engaged citizens in their communities; to welcome and respect diversity of all kinds; and to help improve the fields and communities where they work and live.

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.

Additional Accreditations

For more information and a list of Programmatic Accreditations, click here.

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.

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CONTACTS

2025-2026

CONTACTS

Directory/General Questions 412-365-1100
communications@chatham.edu

ADMISSION & AID

Admissions 800-837-1290
Undergraduate. . . . . undergraduate@chatham.edu
Graduate . . . . . graduate@chatham.edu

Financial Aid. 412-365-2781
financialaid@chatham.edu

Student Accounts 412-365-2719
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ACADEMICS

Academic Affairs 412-365-1157
academicaffairs@chatham.edu

Academic Success Center 412-365-1606
success@chatham.edu

Academic Advising . . . . . advising@chatham.edu
Academic & Accessibility Resources (OAAR). 412-365-1523
oaar@chatham.edu

Career Development. 412-365-1209
careers@chatham.edu

Global Engagement 412-365-1388
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Dean's Office, College of Arts & Sciences 412-365-2467
SAS@chatham.edu

Dean/Executive Director's Office, School of Business & Enterprise. 412-365-1192
SBE@chatham.edu

Dean's Office, College of Health Sciences. 412-365-1711
CHS@chatham.edu

Dean's Office, Falk School of Sustainability & Environment. 412-365-1347
FSSE@chatham.edu

Registrar 412-365-2963
registrar@chatham.edu

PUBLIC SAFETY

Non-Emergency 412-365-1230
publicsafety@chatham.edu

Emergency. 412-365-1111

STUDENT EXPERIENCE

Office of Student Affairs 412-365-1286
osa@chatham.edu

Counseling Center. 412-365-1282
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Diversity, Equity & Inclusion 412-365-2499
odei@chatham.edu

Residence Life 412-365-1518
reslife@chatham.edu

Student Engagement and Leadership. 412-365-2990
StudentEngagement@chatham.edu

Student Health Services. 412-365-1714
healthservices@chatham.edu

Athletic & Fitness Center 412-365-1519
afc@chatham.edu

Athletics. 412-365-1625
athletics@chatham.edu

Dining Services 412-365-1506
parkhurst@chatham.edu

CAMPUS SERVICES

Business Office. 412-365-1229
businessoffice@chatham.edu

Chatham Bookstore . . . . . chatham.ecampus.com

Chatham Gear Shop 412-365-1271
parkhurst@chatham.edu

Copy Center 412-365-1108
copy@chatham.edu

Human Resources 412-365-1847
HR@chatham.edu

IT HelpDesk. 412-365-1112
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alumni@chatham.edu

University Advancement 412-365-1581
annualfund@chatham.edu

chatham UNIVERSITY

UNIVERSITY POLICIES

2025-2026

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

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

Non-Academic Leaves of Absence

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/ WITHDRAWAL

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 for the current semester will be adjusted as follows:

- Submitted prior to midterm grades: Cancellation (courses removed from the transcript)
- Submitted after midterm grades, but before the end of term: W (recorded on the transcript)

Account and Financial Aid

Students seeking Medical Schedule Cancellation/Withdrawal should speak with the Office of Financial Aid 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.

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.

Student Grief Accommodations

Need: Losing a loved one can be difficult for anyone to process. Students at Chatham should have an appropriate amount of time to grieve their loved one without being penalized academically.

Purpose of a bereavement policy for students: Offers guidance to provide students with the time to grieve the loss of an immediate or extended family member.

Bereavement leave of three business days should be granted for immediate or extended family members.

- Immediate and extended family members include parent(s) or legal guardian(s), sibling(s), spouse or partner, children, relatives living in the student's household, grandparent(s), uncle(s) or aunt(s), niece(s) or nephew(s), step-related individual(s), legal in-law(s)

In addition to bereavement leave, Chatham students should receive two additional days to travel to funerals or family gatherings (these can be business or non-business days). Reminder that students can apply to the Student Emergency Fund through Cougars Care to pay for travel expenses.

Upon their return, students should be given seven days (bereavement time plus travel time) to make up missed academic work, assignments, and exams.

Acceptable documentation for bereavement leave and travel time include the obituary, a copy of the death certificate, a funeral service program, or a signed letter from the funeral home.

Students can notify Student Affairs about the need for bereavement leave via a Cougars Cares self-referral. The responding member of the Care Team will then ask for verification documentation. Providing false documentation may be considered an Honor Code violation.

The student should work with their instructors to make practical arrangements related to the leave, travel time, and making up assignments and exams. Any challenges related to make-up work should be directed to the Dean of the School that class resides in or the student's program.

Students who continue to grieve can receive support through the Counseling Center or community resources provided by Student Affairs or the Counseling Center and may apply for medical leave/medical cancellation.

Internships and clinical placement hours cannot be reduced due to this policy. Students should work with their site to make necessary arrangements.

A student wishing to challenge a grade received as related to the bereavement policy should follow the grade appeal process, outlined in the Course Catalog.

chatham UNIVERSITY

ACADEMIC POLICIES

2024-2025

Undergraduate Academic Policies

SATISFACTORY ACADEMIC PROGRESS POLICIES

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.

An automatic appeal for the dismissal from the Pathways to Nursing (PTN) program will be submitted on a student's behalf when earning a term GPA of less than 1.0 or below due to a low grade in the nursing courses at UPMC Shadyside School of Nursing. The student will be placed on probation instead of suspension and must adhere to the Academic Probation guidelines outlined below.

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.

RN-BSN Academic Standing and Progression Policy

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

1. Any core required RN-BSN course(s) with an earned grade below C- (70%) must be retaken and a passing grade must be achieved. A second earned grade below C- (70%) 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 earned a Term GPA below 2.0 in any term 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 Term 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 earned a Term GPA below 2.0 in two consecutive terms, or has a cumulative GPA below 2.0 after two or more terms, 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 the following semester/term to have the probationary status removed.

4. A student who earned a GPA below 2.0 in three terms, consecutive or not, or has earned a cumulative GPA below 2.0 after three terms, 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 term. 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 ACTIONS

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.

Administrative Withdrawal

In extraordinary circumstances, when a student is unable or unwilling to request a voluntary leave of absence or a voluntary medical leave of absence, and there is a clear need to protect the safety of the student and/or others, or to protect the integrity of the University's learning environment, the Vice President of Student Affairs and Dean of Students or the Provost (as applicable) may withdraw a student from a current and/or future academic term.

Students will be dropped with a grade of W, with the reason code as "Administrative Withdrawal." Students who are administratively withdrawn will also be required to reapply for admission to the University to resume their studies in a future semester. In cases where students are removed for medical issues, students may be required to submit documentation from a medical provider that supports the student's ability to return without medical implications.

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.

STUDENT-INITIATED ACTIONS

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.

NOTE: Students in the Engineering Dual Degree program will have their academic records noted as "active / not enrolled" at Chatham. At least once per year, participating students must notify the Chatham Program Liaison(s) of their intent to complete the Chatham degree to remain in "active / not enrolled" status.

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.

Continuous Enrollment Policy for RN-MSN and BSN-DNP Students

Students electing to enroll in the RN-MSN or BSN-DNP Integrated Degree Programs must remain in continuous enrollment in order to receive the shared credits between two degrees as required for University accreditation. Leave of absences from the RN-MSN or BSN-DNP Integrated Degree Program may only be taken in extreme circumstances only with prior approval from the dean.

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 e-mails 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

RECOGNITION OF ACADEMIC ACHIEVEMENTS

Dean's List (Fall and Spring Semesters)

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.

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

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 GUIDELINES

Academic Calendar

The 2025-2026 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 five- or 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

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 18 credits is also considered financial overload. Students on financial overload will be charged additional tuition for every credit in excess of 18 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.

Class Standing

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.

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.

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

Internship Learning Agreement Credits

Students are not permitted to register an internship for credit that occurred during a previous academic term when the internship has already concluded.

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.

RN-BSN Statute of Limitations

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.

Zero Credit Hour Courses

In general, academic courses should be offered for academic credit to reflect the time and effort that both students and faculty invest in the courses. In certain circumstances, however, the need to facilitate student progress by engaging them in innovative experiences beyond the classroom may be facilitated by academic departments developing and offering zero (0) credit courses. Zero credit courses are appropriate in academic settings where students are participating in coursework that is largely self-directed and to or as part of a co-curricular experience. Generally, zero-credit courses are used for tracking student progress at the institution and keeping the student in an active status.

Requests for zero credit courses must be submitted through the existing curriculum approval process (Graduate Program Committee and/or Undergraduate Program Committee) and should meet these conditions:

- Students will primarily work independently to complete the course activities
- The course does not meet as a class on a regular basis

- The course requires minimal use of university resources (e.g., faculty time involvement, library resources, supplies, and transportation)
- Evaluation of student work/performance/completion is accomplished with nominal assessment
- The course uses P/F grading and will be recorded on a student's transcript
- The course will not be included in a student's GPA calculation
- Programs may have no more than two 0-credit courses in their curricula
- 800-level courses, including continuing credit courses, cannot be offered for 0 credit
- Programs that require 0-credit courses must explicitly state that those courses are program requirements
- Students taking 0-credit courses will be assessed a fee of $200 to cover course administration expenses

Deviations from these conditions must be clearly justified in writing to be approved by the school/college dean and the appropriate curricular committee.

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, servicelearning 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 programs offer 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 programs 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.
  - **NOTE:** Students in the Engineering Dual Degree Program are exempt from this requirement.
- 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

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 an option (LNG courses taken P/F may count for general education--humanities, depth, and GLB mission--requirements). 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.

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

Graduation requirements include First-year Writing and two W courses in the major. W courses incorporate the Written Communication learning outcomes and offer instruction and practice in writing.

- 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 in order 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 OAAR. 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

Graduation requirements include one P course (for Oral Presentation). P courses incorporate the Oral Communication learning outcome and offer instruction and practice in oral presentation.

- Students will be able to present coherent, clear, and effective oral presentations using general academic conventions as well as appropriate discipline-based conventions in order to reach a variety of audiences.

Information Literacy

The following outcomes are incorporated into a variety of courses across the curriculum and are assessed in W courses.

- 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 two Wellness (WEL) credits over one or two 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 Breadth Courses

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.

General Education Depth Courses

In addition to the breadth courses 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.

Depth Courses include all 200-level courses that are not an option on a student's primary major checklist. These nine credits allow students to continue to take courses in something other than their major that might become a minor or even a second major or may just be an additional nine credits in something the student finds interesting.

Chatham will accept transfer courses from all areas of study that meet these requirements.

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

General Eduation Mission-Related Courses

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 requirement.

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.

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 School of Business & Entrepreneurship.

Self-Designed Majors

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 BA, BFA, BIA, BS or BSW 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

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.

UNDERGRADUATE 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.

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.

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 graduate 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, click here.

Graduate programs with IDP options

College of Arts & Sciences

- Master of Fine Arts in Creative Writing
- Master of Science in Biology

College of Health Sciences

- Doctor of Physical Therapy
- Entry-level Doctor of Occupational Therapy
- Master of Physician Assistant Studies
- Master of Arts in Psychology
- Master of Science in Counseling Psychology
- Master of Science in Athletic Training
- RN to Master of Science in Nursing
- BSN to Doctor of Nursing Practice

Falk School of Sustainability & Environment

- Master of Arts in Food Studies
- Master of Sustainability

School of Business & Enterprise

- Master of Business Administration

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).

Engineering Dual Degree Program

For students interested in pursuing a degree in Engineering, but who are looking for the Chatham experience, the university has entered into a dual degree program with the University of Pittsburgh. Under this dual degree program, students will have the opportunity to earn an undergraduate degree from Chatham and a second undergraduate degree in Engineering from the University of Pittsburgh in as few as 5 years. The requirements of the dual degree program are as follows:

- The student must have been enrolled at Chatham University for at least the past two years.
- The student must have received a cumulative GPA of 3.0 or higher as calculated on a 4.0 scale. Students intending to apply to Bioengineering must have received a cumulative GPA of 3.5 or higher.
- The student must have received a favorable recommendation from the Chatham Engineering Program Liaison(s). This recommendation must be included in the student's application packet to the University of Pittsburgh.
- The student must have successfully completed the specific science and math prerequisite courses for the intended major with a re-calculated GPA of 3.0 in these courses and a grade of C or better in each course.
- The student must have completed or plan to transfer back courses for the major requirement prescribed by Chatham University for graduation.
- Admission to the University of Pittsburgh is dependent on meeting the above criteria and having space available in the student's applied engineering major at the junior level.

The articulation program will normally consist of three years of instruction at Chatham, followed by instruction at the University of Pittsburgh. While some students may be able to complete the prescribed engineering courses in four semesters (two years), certain engineering degree programs may necessitate attendance for additional terms to complete all degree requirements.

After completing courses at the University of Pittsburgh that will be applied toward remaining requirements for the Chatham degree through reverse transfer, participating students will be qualified to graduate from Chatham with an undergraduate degree. Note that if a student requests degree conferral from Chatham before completing the University of Pittsburgh degree, they may see a change in status to post-baccalaureate, which could impact their eligibility for undergraduate financial aid. Upon successful completion of their Engineering program at the University of Pittsburgh, a student is qualified to graduate with that degree as well. Please contact the Chatham Engineering Program Liaison(s) for more information on this opportunity.

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, click here.

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 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.

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

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 eight 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 eight 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.

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).

ADVISING

Advising Mission

Academic Advising at Chatham University is located within the Academic Success Center, along with Career Development, Global Engagement, and the Office of Academic & Accessibility Resources (OAAR). Advising's mission is to provide students with the foundation, guidance, and skills to navigate their academic, personal, and professional goals. To this end, the advising program strives to meet the following:

- 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 aspirations 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

Incoming first-year students are assigned to a staff advisor in Academic Advising for their first two terms. Staff advisors work closely with their advisees throughout the first year, helping them to clarify and identify their interests, values, and academic and career objectives. They also provide guidance on university requirements and help students adjust to college-level academic expectations. After two semesters, students transition to a faculty advisor within their intended major and/or academic discipline, who assumes primary advising responsibilities. Staff advisors in Academic Advising remain available to support both students and faculty throughout the student's program and will continue to engage with students regarding important university deadlines and program milestones.

Students may declare a major or minor or request a change of advisor at any point after matriculation; however, they are strongly encouraged to declare a major before 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 Graduate Admissions 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 their 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 their academic advisor.

Graduate Academic Policies

SATISFACTORY ACADEMIC PROGRESS POLICIES

For programs that use a letter grade (i.e., not pass/fail) basis, 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 attempted more than twice. If the repeated grade earned is less than B-, the student will be dismissed.

For additional information related to program progression, please refer to the professional program's specific handbook.

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.

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 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.

STUDENT-INITIATED ACTIONS

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.)

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.

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 e-mails 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

ACADEMIC GUIDELINES

Academic Calendar

The 2025-2026 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 five- or 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

Unless otherwise specified, a student pursuing a graduate degree who is registered for more than 12 (16 for ELOTD, 19 for MPAS, MSBIO, and DPT; 16 in semester 1 and 17 in semester 2 for MSAT students) 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, dual master's degree, or doctoral program.

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.

Repeating Courses Policy

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

Professional programs may have more specific requirements on repeating courses. Refer to the Handbooks of programs for details.

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).

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.

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

Statute of Limitations

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 polices regarding the statute of limitations. Professional programs may also have specific requirements on statutes of limitations. Refer to specific programs' handbooks for more details.

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.

Internship Learning Agreement Credits

Students are not permitted to register an internship for credit that occurred during a previous academic term when the internship has already concluded.

Zero Credit Hour Courses

In general, academic courses should be offered for academic credit to reflect the time and effort that both students and faculty invest in the courses. In certain circumstances, however, the need to facilitate student progress by engaging them in innovative experiences beyond the classroom may be facilitated by academic departments developing and offering zero (0) credit courses. Zero credit courses are appropriate in academic settings where students are participating in coursework that is largely self-directed and to or as part of a co-curricular experience. Generally, zero-credit courses are used for tracking student progress at the institution and keeping the student in an active status.

Requests for zero credit courses must be submitted through the existing curriculum approval process (Graduate Program Committee and/or Undergraduate Program Committee) and should meet these conditions:

- Students will primarily work independently to complete the course activities
- The course does not meet as a class on a regular basis
- The course requires minimal use of university resources (e.g., faculty time involvement, library resources, supplies, and transportation)
- Evaluation of student work/performance/completion is accomplished with nominal assessment
- The course uses P/F grading and will be recorded on a student's transcript
- The course will not be included in a student's GPA calculation
- Programs may have no more than two 0-credit courses in their curricula
- 800-level courses, including continuing credit courses, cannot be offered for 0 credit
- Programs that require 0-credit courses must explicitly state that those courses are program requirements
- Students taking 0-credit courses will be assessed a fee of $200 to cover course administration expenses

Deviations from these conditions must be clearly justified in writing to be approved by the school/college dean and the appropriate curricular committee.

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.

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

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 five years prior to admission to a graduate program at Chatham University.

Students enrolling in the MSN program may transfer up to six credits into their program, pending approval of credits. Students enrolling in the DNP program may not transfer any credits into their program.

ADVISING

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.

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.

Articulation Agreements

Chatham University Articulation Agreements

chatham UNIVERSITY

UNIVERSITY REGISTRAR

2025-2026

Policies & Procedures

ACCESS TO STUDENT EDUCATIONAL RECORDS

FERPA

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An "eligible student" under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution at any age.) These rights include:

1. The right to inspect and review the student's education records within 45 days after the day Chatham University receives a request for access. A student should submit to the University Registrar, dean, head of the academic department, or other appropriate school official, a written request that identifies the record(s) the student wishes to inspect. The school 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 school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

   A student who wishes to ask Chatham University to amend a record should write to the school official responsible for the record, clearly identify the part of the record the student wants changed and specify why it should be changed.

   If Chatham University decides not to amend the record as requested, Chatham University will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before Chatham University discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

   Chatham University discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official typically includes a person employed by Chatham University in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of Chatham University who performs an institutional service of function for which the school would otherwise use its own employees and who is under he direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official typically has a

legitimate educational interest if the official needs to review an education record to fulfill his or her professional responsibilities for Chatham University.

To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of (§99.31and §99.34).

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:

   U.S. Department of Education
   Student Privacy Policy Office
   400 Maryland Avenue, SW
   Washington, DC 20202-8520

   FERPA.Complaints@ed.gov

Student Release Form

Student records are protected under the Family Educational Rights and Privacy Act Students who wish to give Chatham University **permission to release non-directory information to a third party must sign and submit this form**.

FERPA Student Release Form

Click here to download form.

Directory Information

Chatham University, in accordance with FERPA, has designated the following categories of information about individual students as public, or directory information. This information may be released to any inquirer unless you specifically request that a FERPA hold be placed on your record: Student's legal name, local address, local telephone number, Chatham e-mail address, permanent address, permanent telephone number, date and place of birth, major field of study, honors and awards (e.g. Dean's List recognition), participation in 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.

FERPA Request for Non-Disclosure of Directory Information Form

Student records are protected under the Family Educational Rights and Privacy Act. Students who wish to prevent the release of directory information must complete this form.

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. 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.

Adding and Dropping Courses

In consultation with their advisors, students may add or drop courses via the Student Portal until the end of the add/drop period for the term (see the Academic Calendar). If a course is closed or if the prerequisite is an issue, you can submit a Prerequisite Closed Course Override Form (located on Documents and Forms) to the Advising Center. If an approval is granted, you will be notified and registered for the course.

Students can submit a retroactive petition (see Retroactive Petitions) to add or drop a course after the conclusion of the add/drop period (see section below). Approvals are not guaranteed, and students should seek the support of their advisor prior to submission.

Course Withdrawal

After the add/drop period, students have the option to withdraw from a course. The last day to withdraw deadline is posted on the Academic Calendar. A grade of W will be recorded on the transcript. Withdrawing from a course may impede academic progress. Students should consult their academic advisor and financial aid prior to requesting a course withdrawal.

This action must be completed by way of the course withdrawal form available online under Documents & Forms on myChatham.

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.

Auditing Courses

The audit of a course is limited to Chatham University courses at the undergraduate or graduate level and does not include independent study courses. Audited courses do not carry academic credit; however, tuition is charged based on the course's credit value. A grade of "AU" will appear on the transcript to indicate the audit status. Students interested in auditing a course must first receive the faculty member's written permission and submit their request to the Registrar's Office no later than the conclusion of the add/drop period.

Students auditing a course may be required to participate in class discussions, complete practicum assignments, submit written work, and take exams, at the discretion of the instructor. Courses required for a major, minor, or general education may not be audited.

Retroactive Petitions

Students who fill out a retroactive petition are requesting consideration for failing to meet an established University deadline. 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**.

VERIFICATIONS

General

After the start of the semester, general enrollment information can be verified via the National Student Clearinghouse Self-Service portal. 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. 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

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 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.

POSTING OF ACADEMIC HONORS

Academic honors also are conferred at degree conferral 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.

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. There is a fee involved. Please see the University's Academic Calendar for submission deadlines.

When you submit an application, your degree progress will be reviewed by your advisor/program. 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

1. On myChatham under My Tools search for APPLICATION FOR DEGREE CONFERRAL. If the date you seek is available, then you are done. Please alert your advisor to your application.
2. If the date you want is not listed as an option, please select an available date and proceed to the next step.

TRANSCRIPTS

Current and former students who are in good standing may request an official electronic copy of their University record. A per transcript fee is rquired. 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 go to my.Chatham.edu > my tools > Parchment Transcripts. Your identity will be authenticated through our secure login.

Alumni and Former Students

Should visit Chatham University Transcript Request > Parchment to place an order. Orders are authorized via electronic signature, and you will need to include your social security number or your Chatham student number.

Grades

CHANGE OF GRADE

A student who questions the grade should first confer with the instructor. If the instructor agrees that the grade is incorrect, the instructor corrects the grade using the Grade Change tool 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. If the instructor does not agree, the student may consider an appeal (see section on Academic Grade Appeals).

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.

FINAL GRADES

After faculty members submit grades, they will 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 semester 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

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 can be updated to another letter grade if it falls within the one year deadline for grade changes. 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. Major and minor courses may not be taken pass/fail except in cases where pass/fail grading is an approved option. 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+ (GPA 2.3)
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.

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.

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, from the Pittsburgh Council of Higher Education (PCHE): Carlow University, Carnegie Mellon University, Community College of Allegheny County, Duquesne University, La Roche University, 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 be posted to their Chatham records. Additional information on cross-registration may be obtained from the University Registrar's office.

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.

chatham UNIVERSITY

FINANCIAL AID & STUDENT ACCOUNTS

2024-2025

Financial Aid Policies

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:
  - A breakdown of the individual components of the institution's Cost of Attendance, designating all potential billable charges.
  - Clear identification of each award, indicating type of aid, i.e. gift aid (grant, scholarship), work or loan.
  - Standard terminology and definitions.
  - 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.

Student Accounts Procedures

TUITION AND FEES

Undergraduate

Undergraduate education at Chatham University consists of tuition, fees and expenses associated with lodging, food, insurance, facilities, technology, and travel. Our generous scholarships, grants and help with financial aid all help make a Chatham education more affordable.

To understand your costs, click here.

For information on loans and payment options, 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.

To understand your costs, click here.

For information on loans and payment options, click here.

BILLING AND MONTHLY ACCOUNT STATEMENT

The Office of Student Accounts will generate and send a semester billing notification via e-mail to all registered students approximately a month prior to the semester tuition due date. All billing will be electronic. Monthly billing notifications will continue to be sent via e-mail to those students with remaining balances. This billing notification will include important due dates, and will direct students to view their eStatement and submit payment via TouchNet. Up-to-date eStatements can be generated at anytime via TouchNet.

Tuition Installment Plans

Payment plans provides an option for you to schedule, budget, and make tuition payments directly from a bank account, credit or debit card, or international wire transfer. Each plan has a $35.00 application fee, which is due at time of enrollment. Chatham University uses Touch Net solutions to manage our payment plans.

- Avoid incurring student loan debt by paying as you go
- Easy and quick sign up with 24 hour online access for ongoing management
- Automatic reminders so you don't miss a payment
- Accounts are automatically recalculated and updated as changes occur

Click here to download a PDF with instructions on how to enroll in a payment plan.

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. 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.

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
- 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.

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 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 1, otherwise they will be subject to either a $300 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.

ADMISSIONS INFORMATION

Admission Information

The Office of Admissions is a resource for answering questions about Chatham University, assisting in the application process, and helping students make the most informed decision possible about their college education.

Click here for information on undergraduate admission details and requirements at Chatham.

Click here for information on Graduate Admission details and requirements at Chatham, visit or click here to visit individual graduate program pages.

chatham UNIVERSITY

DEGREE PROGRAMS

2025-2026

COURSE NUMBER KEY

FE = Field Experience
L = Lab
S = Studio
W = Writing Intensive

College of Arts & Sciences 77

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Biology 83
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Communication 87
Creative Writing 89
Criminology 90
Cultural Studies 91
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International Studies 98
Mathematics 99
Media Arts 100
Music 103
Music Business 104
Music Technology 104
Neuroscience 105
Policy Studies 106
Political Science 108
Psychology 110
Social Work 111
Visual Arts 112
Women's and Gender Studies 113

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African American Studies Minor 115
Art Museum Studies Minor 116
Communications Minors 116
Creative Writing Minor 117
Criminology Minor 118
Dance Minor 118
English Minor 119
Environmental Writing Minor 120
French Minor 120
German Minor 121
History Minor 121
Holocaust, Genocide & Human Rights Minor 122
Jewish Studies Minor 122
Media Arts Minors 122
Music Minor 124
Music Business Minor 124
Music Technology Minor 124

Philosophy Minor 124
Physics Minor 125
Political Science Minor 125
Pre-Law Minor 126
Psychology Minor 126
Social Services Administration Minor 127
Social Work Minor 128
Spanish Minor 128
Theater Minor 129
Visual Arts Minors 129
Women's and Gender Studies Minor 130

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Management Minor 199
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Graduate Certificate Programs 203
Entrepreneurship Certificate 203
Project Management Certificate 203
Sustainability Management Certificate 203

College of Arts & Sciences

The College of Arts & Sciences (CAS) at Chatham University is 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 CAS.

UNDERGRADUATE MAJORS

- Arts Management
- Biochemistry
- Biology
- Chemistry
- Communication
- Creative Writing
- Criminology
- Cultural Studies
- Education: PreK-4
- English
- History
- Immersive Media
- Interior Architecture
- International Studies
- Mathematics
- Media Arts
- Music
- Music Business
- Music Technology
- Neuroscience
- Policy Studies
- Political Science
- Psychology
- Social Work
- Visual Arts
- Women's and Gender Studies

UNDERGRADUATE MINORS

- African-American Studies
- Art Museum Studies
- Communication
- Creative Writing
- Criminology
- Dance
- English
- Environmental Writing
- French
- German
- History
- Holocaust, Genocide & Human Rights
- Jewish Studies
- Media Arts
- Music
- Music Business
- Music Technology
- Philosophy
- Physics
- Political Science
- Pre-Law
- Psychology
- Social Services Administration
- Social Work
- Spanish
- Theater
- Visual Arts
- Women's and Gender Studies

CERTIFICATE PROGRAMS

- Environmental Social Work Certificate
- Forensic Social Work Certificate
- International Studies Certificate
- Modern Language Certificate
- Social, Emotional and Behavior Wellness in Education Certificate
- Women's Leadership Certificate
- Teaching Certifications

GRADUATE PROGRAMS

- Biomedical Studies, Master of Arts (MABS)
- Creative Writing, Master of Arts (MACW) and Master of Fine Arts (MFACW)
- Interior Architecture, Masters (MIA)

UNDERGRADUATE MAJORS

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.

Arts Management

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.

BA in Arts Management Major Requirements

30 core credits + 15-20 elective credits, depending on concentration

REQUIRED COURSES

ACT 222	Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS243	Principles of Marketing (3)
BUS452	Managing Nonprofit Organizations (3)
BUS272	Principles of Finance (3)
FDT300W	Critical Theory (3)
ECN101	Principles of Macroeconomics (3) **OR**
ECN102	Principles of Microeconomics (3)
ART490	Integrative Capstone Seminar (3)

CHOOSE ONE WRITING INTENSIVE COURSE

BUS230W	Organizational Behavior (3)
ART230W	Women and Art (3)
ART309W	Art + Land (3)
COM234W	Persuasion (3)
COM260W	Public Relations (3)

Art History Concentration

ART131	History of World Art I: Prehistory to 1400 (3)
ART132	History of World Art II: 1400 to Present (3)
ART213	Special Topics (3) **OR**
ART313	Special Topics (3)
ART231	Italian Renaissance Art: Creating the Modern West (3) **OR**
ART234	The Baroque: Art and Propaganda (3)
ART254	Modern Art, 1900 to Present (3) **OR**
ART328	The Carnegie International (3)
ART248	19th Century Europe: Art and Revolution (3) **OR**
ART366	American Art to 1900: Who We Are (3)

Art Museum Studies Concentration

REQUIRED

ART208	Introduction to Art Museum Studies (3)
ART368	Museum Education (3)
ART372	Curating African Art (3)
ART378	Curating the Visual Arts (3)
INTART303	Internship (3)

CHOOSE ONE ELECTIVE

ART213	Special Topics (3)
ART313	Special Topics (3)
ART328	The Carnegie International (3)

Dance Concentration

REQUIRED

DAN101	Dance History: Embodying the Past (3)
DAN121	Contemporary Dance Technique 1 (3)
DAN213	Special Topics (3) **OR**
DAN313	Special Topics (3)
DAN239	Dance Performance (3)
DAN305	Choreography (3)

CHOOSE ONE ELECTIVE

DAN125	Folk and Ethnic Dance (3)
DAN160	Rhythms Beyond Borders (3)
DAN493	Independent Study (3)

Film & Digital Technology Concentration

REQUIRED

ART241S	Lighting Principles (3)
FDT150S	Introduction to Digital Video Production (3)
FDT350S	Intermediate Digital Video Production (3)
FDT421S	Digital Animation and Composing Modes (3)
FDT450S	Advanced Digital Video Production Studio (3)

CHOOSE ONE ELECTIVE

ART213	Special Topics (3)
ART313	Special Topics (3)
COM213	Special Topics (3)
COM313	Special Topics (3)
FDT161	Intro to Film, Video and New Media (3)
FDT213	Special Topics (3)
FDT267S	Intor to Podcasting
FDT313	Special Topics (3)
FDT331	The Craft of Screenwriting (3)
FDT469S	Advanced Visual Effects (3)

Graphic Design Concentration

ART225S	Typography Design Studio (3)
ART245S	Design Praxis (3)
ART353S	Print Design Studio (3)
ART365S	Visual Communication (3)
ART370S	Digital Illustration (3)
ART489	Portfolio (3)

Music Concentration

REQUIRED

MUS159	Music Fundamentals (3)

CHOOSE TWO 3- OR 4-CREDIT MUS COURSES

CHOOSE THREE 2-4 CREDIT MUA OR MUS COURSES

Photography Concentration

REQUIRED

ART142S	Photo I: Black and White Darkroom (3)
ART152S	Photo II: Intro to Digital Photography (3)
ART241	Lighting Principles (3)
ART247	Photography III: Advanced Digital Imaging
ART388	Landscape Photography (3)

CHOOSE ONE ELECTIVE

ART210	History of Photography (3)
ART213	Special Topics (3)
ART313	Special Topics (3)
COM213	Special Topics (3)
COM313	Special Topics (3)
FDT213	Special Topics (3)
FDT313	Special Topics (3)
COM374	Photo V: Documentary and Photojournalism (3)
ART483	Event Photography (3)

Studio Art Concentration

CHOOSE TWO 100 LEVEL COURSES

ART117S	Drawing (3)
ART214S	Design Studio (3)
ART220S	Material Studies Studio (3)

CHOOSE ONE ELECTIVE

ART111S	Ceramics (3)
ART115S	Painting (3)
ART127S	Printmaking (3)
ART205S	Sculpture Studio (3)
ART217S	Drawing Studio (3)

CHOOSE ONE ELECTIVE

ART311S	Ceramics Studio (3)
ART315S	Painting Studio (3)

ART327S	Printmaking Studio (3)
ART417S	Drawing Studio (3)
ART405S	Sculpture Studio (3)
ART420S	Material Studies Studio (3)

Theater Concentration

REQUIRED

THT141	Acting One (3)
THT147	Stage Craft (3)
THT231	Acting Two (3)
THT241	History of Drama (3)

CHOOSE SIX CREDITS

THT149	Play Performance I (3)
THT213	Special Topics (3)
THT245	Practicum in Technical Theatre I (3)
THT260	Theatre Production Lab (3)
THT458	Directing (4)
THT491	Independent Study (1)

Biochemistry

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

BS in Biochemistry

66 credits of required courses and 13 credits of restricted electives

BIO143	**The Cell**
BIO143L	**The Cell Lab**
BIO144	The Organism (3)
BIO144L	The Organism Lab (1)
BIO231	Cell & Molecular Biology (3)
BIO321	General Microbiology **OR**
BIO417	Genetics (3)
CHM107	Chemistry I (3)
CHM108	Chemistry II (3)
CHM109L	Chemistry I Lab (1)
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM206	Organic Chemistry II (3)
CHM209	**Inorganic Chemistry**
CHM215L	Elementary Organic Chemistry Lab (2)
CHM216LW	Organic Chemistry Lab (2)

CHM311	Physical Chemistry I (3)
CHM317L	Integrated Chemistry Lab (2)
CHM318L	Chemistry Analysis Lab (3)
CHM322	Topics in Analytical Chemistry (3)
CHM338	Biochemistry I (3)
CHM339	Biochemistry II (3)
CHM340L	Macromolecule Lab (2)
CHM490	Chemistry Capstone (3)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3)**
MTH151	**Calculus I**
MTH152	Calculus II (4)
PHY251	Principles of Physics I (4)
PHY252	Principles of Physics II (4)
PHY255L	Physics I Lab (1)
PHY256L	Physics II Lab (1)

***Bold courses** count as General Education credits

BA in Biochemistry

41 credits of required courses and 6 credits of restricted electives

BIO143	**The Cell**
BIO143L	**The Cell Lab**
BIO144	The Organism (3)
BIO144L	The Organism Lab (1)
BIO231	Cell & Molecular Biology (3)
CHM107	Chemistry I (3)
CHM108	Chemistry II (3)
CHM109L	Chemistry I Lab (1)
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM206	Organic Chemistry II (3)
CHM215L	Elementary Organic Chem. Lab (2)
CHM216LW	Organic Chemistry Lab (2)
CHM338	Biochemistry I (3)
CHM339	Biochemistry II (3)
CHM340L	Macromolecule Lab (2)
CHM2xx/3xx	Chemistry Elective (3)
CHM490	Chemistry Capstone (3)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3)**

***Bold courses** count as General Education credits

Biology

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 BA degree is appropriate for students who want to demonstrate their capability in biology, but also want to explore related areas like teaching.

BA in Biology Major Requirements

35 credits of required courses and 9 credits of restricted electives

REQUIRED COURSES

BIO143	The Cell (3)
BIO143L	The Cell Lab (1)
BIO144	The Organism (3)
BIO144L	The Organism Lab (1)
BIO490	Biology Capstone (3)
CHM107	**Chemistry I (3)**
CHM108	Chemistry II (3)
CHM109L	**Chemistry I Lab (1)**
CHM110L	Chemistry II Lab (1)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3) (3)**
MTH110	**Statistics (3)**

***Bold courses** count as General Education credits

CHOOSE ONE ELECTIVE WITH WRITING INTENSIVE LAB

BIO209	Basic Neuroscience (3) **AND**
BIO209LW	Basic Neuroscience Lab (2)
ENV248	Ecology (3) **AND**
ENV248LW	Ecology Lab (2)
BIO303	Applied and Environmental Microbiology (3) **AND**
BIO303LW	Applied and Environmental Microbiology Lab (2)

Or a course from the BIO300-400 level electives or additional course pre-approved by the Department Chair

CHOOSE ONE ELECTIVE WITH A LAB

BIO201	Anatomy (3) **AND**
BIO201L	Lab: Anatomy (2)
BIO204	Botany (3) **AND**
BIO204L	Botany Lab (2)

CHOOSE ONE ELECTIVE

BIO217	Human Genetics (3)
BIO218	Women's Health Issues (3)
BIO231	Cellular and Molecular Biology (3)
BIO319	Experimental Neuroscience (3)
BIO408	Developmental Biology (3)
BIO417	Genetics (3)
BIO419	Immunology (3)

BIO458 Histology (3)
CHM339 Biochemistry II (3)
Or additional course pre-approved by the Department Chair

CHOOSE ONE ELECTIVE WITH A LAB

BIO302 Physiology **AND AND**
BIO302L Physiology Lab
BIO321 General Microbiology
BIO321L General Microbiology Lab
CHM338 Biochemistry I **AND**
CHM340L Macromolecule Lab
ENV484 Plant Physiology **AND**
ENV484L Plant Physiology Lab

Elective courses may be substituted with a course pre-approved by the Department Chair.

BS in Biology

36 core credits + 27-29 track specific credits

REQUIRED CORE COURSES

BIO143 The Cell (3)
BIO143L The Cell Lab (1)
BIO144 The Organism (3)
BIO144L The Organism Lab (1)
CHM107 Chemistry I (3)
CHM108 Chemistry II (3)
CHM109L Chemistry I Lab (1)
CHM110L Chemistry II Lab (1)
CHM205 Organic Chemistry I (3)
CHM215L Elementary Org. Chem. Lab (2)
MTH110 Statistics (3)
MTH151 Calculus 1 (4)
IND200W Introduction to Scientific Research (2)
IND350W Scientific Research Methods (3)
BIO490 Biology Capstone (3)

***Bold courses** count as General Education credits

Cell & Molecular Track

REQUIRED COURSES

BIO231 Cell and Molecular Biology (3)
CHM206 Organic Chemistry II (3)
CHM216LW Organic Chemistry Lab (2)
CHM338 Biochemistry I (3)
CHM340L Macromolecule Lab (2)
PHY151 Fundamentals of Physics I (3) **OR**
PHY251 Principles of Physics I (4)
PHY152 Fundamentals of Physics II (3) **OR**
PHY252 Principles of Physics II (4)
PHY155L Fundamentals of Physics I Lab (1) **OR**
PHY255L Physics I Lab (1)

PHY156L Fundamentals of Physics II Lab (1) **OR**
PHY256L Physics II Lab (1)

CHOOSE ONE ELECTIVE*

BIO302 Physiology (3)
BIO303 Applied & Environmental Microbiology (3)
BIO321 General Microbiology (3)

CHOOSE ONE ELECTIVE*

BIO408 Developmental Biology (3)
BIO417 Genetics (3)
BIO419 Immunology (3)
BIO423 Neurobiology of Mental Health (3)
BIO458 Histology (3)
BIO461 Aquatic Entomology (3)
BIO487 Neuropathology (3)
ENV484 Plant Physiology (3)

*Elective courses may be substituted with a course pre-approved by the Department Chair.

Human Biology Track

REQUIRED COURSES

BIO201 Anatomy (3)
BIO201L Anatomy Lab (2)
BIO209 Basic Neuroscience (3)
BIO209LW Basic Neuroscience Lab (2)
BIO217 Human Genetics (3)
BIO302 Physiology (3)
BIO302L Physiology lab (2)
BIO321 Microbiology (3)
BIO321L Microbiology Lab (2)

CHOOSE ONE ELECTIVE*

BIO319 Experimental Neuroscience (3)
CHM338 Biochemistry I (3)
CHM339 Biochemistry II (3)

CHOOSE ONE ELECTIVE*

BIO408 Developmental Biology (3)
BIO417 Genetics (3)
BIO419 Immunology (3)
BIO423 Neurobiology of Mental Health (3)
BIO458 Histology (3)
BIO487 Neuropathology (3)

*Elective courses may be substituted with a course pre-approved by the Department Chair.

Chemistry

Approved by the American Chemical Society, the curriculum includes intensive preparation for graduate study and careers in the chemical industry or governmental laboratories.

BS in Chemistry

59 credits of required courses and 10 credits of restricted electives

REQUIRED COURSES

CHM107	**Chemistry I**
CHM108	Chemistry II (3)
CHM109L	**Chemistry I Lab**
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM206	Organic Chemistry II (3)
CHM209	Inorganic Chemistry (3)
CHM215L	Elementary Organic Chem. Lab (2)
CHM216LW	Organic Chemistry Lab (2)
CHM311	Physical Chemistry I (3)
CHM312	Physical Chemistry II (4)
CHM317L	Integrated Chemistry Lab (2)
CHM318L	Chemistry Analysis Lab (3)
CHM322	Topics in Analytical Chemistry (3)
CHM338	Biochemistry I (3)
CHM340L	Macromolecule Lab (2)
CHM490	Chemistry Capstone (3)
CHM3xx	Chemistry Elective (3)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3)**
MTH151	**Calculus I**
MTH152	Calculus II (4)
PHY251	Principles of Physics I (4)
PHY252	Principles of Physics II (4)
PHY255L	Physics I Lab (1)
PHY256L	Physics II Lab (1)

***Bold courses** count as General Education credits

ELECTIVES

CHM339	Biochemistry II (3)
CHM343	Environmental Chemistry (3)
CHM345	Modeling Earth's Climate Change (3)

OR additional course pre-approved by the Department Chair

BA in Chemistry

29 credits of required courses and 10 credits of restricted electives

REQUIRED COURSES

CHM107	**Chemistry I (3)**
CHM108	Chemistry II (3)
CHM109L	**Chemistry I Lab (1)**
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM206	Organic Chemistry II (3)
CHM209	Inorganic Chemistry (3)
CHM215L	Elementary Organic Chemistry Lab (2)
CHM216LW	Organic Chemistry Lab (2)
CHM490	Chemistry Capstone (3)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3) (3)**
MTH151	**Calculus I (3)**

***Bold courses** count as General Education credits

CHOOSE THREE ELECTIVES

CHM311	Physical Chemistry I (3)
CHM312	Physical Chemistry II (4)
CHM318L	Chemical Analysis Lab (3)
CHM322	Topics in Analytical Chemistry (3)
CHM338	Biochemistry I (3)
CHM339	Biochemistry II (3)
CHM343	Environmental Chemistry (3)
CHM345	Modeling Earth's Climate Change (3)

OR additional course pre-approved by the Department Chair

Communication

Communication is a degree targeted to opportunities in a media-savvy world. Students take a common set of core courses that prepare them for an industry with growing convergence in print, broadcast, and online media. Students choose one of four concentrations: communication studies, journalism, public relations, or visual communication design.

BA in Communication

27 core credits plus 18 contration specific credits

REQUIRED CORE COURSES

COM101	Introduction to Communication Theory (3)
COM106	Media & Society (3)
COM223	Qualitative Research Methods (3)
COM234W	Persuasion (3)
COM251	Newswriting and Editing (3)
COM264	Strategic Communication Agency (3)
FDT300W	Critical Theory (3)

COM313	Special Topics (3)
COM490	Integrative Capstone Seminar (3)

Communication Studies Concentration

REQUIRED COURSES

COM209	Intercultural Communication (3)
COM260W	Practical Public Relations (3)
COM351	Advanced Newswriting and Editing (3)
COM355	Organizational Communication (3)

CHOOSE ONE 100-LEVEL ELECTIVE

FDT150S	Introduction to Digital Video Production (3)
FDT160	World Film History (3)
CST183	Representations of Race and Gender (3)

CHOOSE ONE UPPER-LEVEL ELECTIVE

COM374	Documentary and Photojournalism (3)
ART353S	Print Design (3)
ART365S	Visual Communication (3)

Journalism Concentration

ART152S	Photography II: Intro to Digital Photography (3)
ART225S	Typography Design Studio (3)
ART261S	Web Design I: Code + Aesthetics (3)
COM351	Advanced Newswriting and Editing (3)
COM374	Documentary and Photojournalism (3)
FDT150S	Introduction to Digital Video Production (3)

Public Relations Concentration

REQUIRED COURSES

ART152S	Photography II: Intro to Digital Photography (3)
ART245S	Design Praxis (3)
COM260W	Introduction to Public Relations (3)
COM314	Careers in Strategic Communication (3)
COM360	Advanced Public Relations (3)

CHOOSE ONE ELECTIVE

ART225S	Typography Design Studio (3)
ART261S	Web Design I: Code + Aesthetics (3)
FDT150S	Introduction to Digital Video Production (3)
FDT267S	Intro to Podcasting (3)

Visual Communication Design Concentration

ART152S	Photography II: Intro to Digital Photography (3) **OR**
FDT150S	Introduction to Digital Video Production (3)
ART225S	Typography Design Studio (3)
ART245S	Design Praxis
ART261S	Web Design I: Code + Aesthetics (3)
ART353S	Print Design (3)
ART489S	Portfolio (3)

Creative Writing

Students majoring in creative writing 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.

BFA in Creative Writing

39 credits

REQUIRED COURSES

ENG100	Introduction to Literary Studies (3)
ENG242	Introduction to Creative Writing (3)
ENG243	Creative Writing I (3)
ENG244	Creative Writing II (3)
ENG350W	Seminar in Literary Theory and Scholarly Writing (3)
INTENG303	Internship (3)
ENG490	Integrative Capstone Seminar (3)

CHOOSE FOUR, AT LEAST ONE MUST BE A W COURSE

ENG204	World Literature (3)
ENG207	British Writers I (3
ENG208	British Writers II (3)
ENG216W	American Writers I (3)
ENG217W	American Writers II (3)
ENG287	African-American Writers (3)
ENG303	Food and American Identity (3)
ENG321W	Shakespeare Survey (3)
ENG385	Toni Morrison Seminar (3)
ENG425	Bleak Houses: Shifting Landscapes in the English Novel (3)
ENG449	Exiles (3)
ENG429	The Literary Cookbook (3)

CHOOSE TWO PRACTICAL APPLICATION COURSES*

ART261	Web Design 1: Code + Aesthetics (3)
COM251	News Writing and Editing (3)
COM260W	Practical Public Relations (3)
COM255	The Communique Newsroom (3)
COM256	Communique Newsroom III (3)
COM374	Documentary and Photojournalism (3)
ENG234	Literary Publishing (3)
ENG241	Writing for Professionals (3)
ENG310	Summer Community Of Writers (3)
ENG355	Advanced Writing & Stylistics (3)
ENG364	Writing Poetry (3)
ENG365	Writing Prose (3)
ENG366	Writing Nonfiction (3)
ENG367	Writing Genres (3)
ENG513	Writing About Food (3)
ENV327	Writing About Environment Science (3)

FDT331	Craft of Screenwriting (3)
FDT267	Intro to Podcasting (3)
FDT150	Introduction to Digital Video Production (3)
FDT421	Digital Animation And Compositing (3)
FST316	Writing About Food, Farm, and Field (3)

*Other 500-level graduate writing courses may fulfill this requirement, with permission of instructor and the MFACW Program Director.

Criminology

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, 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 law enforcement, legal, correctional, or human services agencies.

BA in Criminology

33 credits

REQUIRED COURSES

CRM101	Introduction to Criminology (3)
CRM224	Juvenile Justice and Child Welfare (3)
CRM225W	Criminology (3)
CRM305	Law Enforcement and Criminal Investigations (3)
CRM310	Survey of Corrections (3)
CRM490	Integrative Capstone Seminar (3)
INTCRM303	Internship (3)
PSY101	General Psychology (3) **OR**
SWK101	Introduction to Sociology (3)
PSY213	Statistics and Research Design (3)
PSY314W	Foundations of Behavioral Research (3)

CHOOSE ONE ELECTIVE

CRM220	Women and the Criminal Justice System (3)
CRM313	Special Topics (3)
CRM320	Criminalization of Mental Illness (3)
CRM332	History of Crime and Punishment (3)
CRM340	Violent and Predatory Crimes (3)
CRM362	What is Evil? (3)
PSY331	Social Psychology (3)
PSY333	Fundamentals of Psychopathology (3)
PSY340	Psychopharmacology (3)
PSY356	Forensic Psychology (3)

SWK201W	Human Behavior in the Social Environment I (3)
SWK321	Social Welfare Policy (3)
SWK325	Deviant Behavior (3)

OR substitute electives approved by the program coordinator

Cultural Studies

Cultural studies draws on social, cultural, and literary theories to pursue the analysis of cultural objects in their social contexts. Students learn to apply contemporary theory, with an emphasis on examinations of race, ethnicity, and class, 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 as cultural phenomena. The electives then allow the opportunity to focus on aspects of the field that meet a student's particular interests.

Cultural studies may be pursued as a single, full major; or paired with one of the other fields for which a combinatory option leading to an interdisciplinary major has been defined.

An interdisciplinary major may be pursued through concentrated study in two related programs, culminating in a capstone that integrates 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 the program, particularly in the interrelations of the subjects to be studied

BA in Cultural Studies

11 courses

REQUIRED COURSES

CST183	Representations of Race and Gender (3)
FDT300W	Critical Theory (3)
ENG350W	Literary Theory and Scholarly Writing (3)
ENG385	Toni Morrison Seminar (3)
INTCST303	Internship (3)
CST490	Integrative Capstone Seminar (3)

CHOOSE TWO CULTURAL STUDIES ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

CST120	Introduction to Jewish Studies (3)
CST204W	East Asian Studies (3)
CST215	Perspectives in Queer Theory (3)
CST234	Asian Foodways (3)
CST342	Post/Modern China: Digital Storytelling (3)
CST351	Asian Pacific Islander America: Culture and History (3)
ENG200	Frankenstein: Creation of Culture (3)
ENG449	Exiles (3)
PHI300	Womanist and Liberation Theology (3)

CHOOSE TWO AFRICAN-AMERICAN STUDIES ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

ART372	Curating African Art and Artifacts (3)
ENG282	20th century African American Literature (3)
ENG287	African American Writers (3)
ENG238	Harlem Renaissance (3)
ENG385	Toni Morrison Seminar (3)
FDT186	Introduction to Black Filmmaking (3)
FDT 225	Female Narration: Race & Gender in Women's Films (3)
HIS205	Africa, Past and Present (3)
HIS228/328	Recent African History and NGO Networks (3)
HIS285	African-American History (3)
HIS360	History of Panafricanism (3)
MUS174	Jazz Survey (3)
MUS150	History of Rock, Pop and Soul (3)

CHOOSE ONE FILM ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

CST235	East Asian Cinema (3)
FDT160	Introduction to World Film History (3)
FDT162	Introduction Film, Video, and New Media Art (3)
FDT186	Introduction to Black Filmmaking (3)
FDT 225	Female Narration: Race & Gender in Women's Films (3)

Education: PreK-4

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 specific general education courses for state certification that are not outlined here. See advising checklist or department chair for more additional requirements.

Students must earn a 3.0 GPA to be recommended for certification by the Pennsylvania Department of Education.

BA in Education

72 credits

REQUIRED COURSES

EDU104	Perspectives on Education (3)
EDU105	Child Development: Birth through Grade 4 (3)
EDU108	Play and Movement (1)
EDU205	Classroom Strategies for Teaching English Language Learners (3)
EDU207	Trends and Issues in Early Childhood Education (3)
EDU219W	Cognitive Learning Theories (3)
EDU227	Literacy I (3)
EDU230	Mathematical Foundations (3)
EDU234	Inclusion: Issues and Strategies (3)
EDU240	Integrating the Arts (3)

EDU241	Pedagogical Practices (3)
EDU319	Methods of Teaching Elementary Social Studies (3)
EDU323W	Educational Research Methods (3)
EDU328	Literacy II: Connections to Literature (3)
EDU335	Methods of Teaching Elementary Math (3)
EDU336	Methods of Teaching Elementary Science (3)
EDU400	Data-Driven Instructional Decisions (2)
EDU409	Differentiated Reading and Writing (3)
EDU411	Early Elementary Curriculum (3)
EDU430	Diverse Family and Community Relationships (3)
EDU431	Assessment and Adaptation (3)
INT/EDU423	Internship/Student Teaching (9)
ICS490	Integrative Capstone Seminar: Self- Assessment and Reflection in Education (3)

English

Students majoring in English 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 consider multiple perspectives and to articulate difficult concepts in clear language, English majors are well-prepared for careers requiring methodical research, intellectual sophistication, clear expression, and a readiness to engage with socio-cultural diversity; they therefore are positioned for success in careers or graduate study in a fields ranging from literature, law, and teaching to creative writing, public relations, and advertising.

Certification in secondary education in English is available. Qualified students may also pursue, via an Integrated Degree Program, a graduate degree in creative writing.

BA in English

36 credits

REQUIRED COURSES

ENG100	Introduction to Literary Studies (3)
ENG204	World Literature (3)
ENG207	British Writers I (3)
ENG208	British Writers II (3)
ENG216W	American Writers I (3)
ENG287	African-American Writers (3)
ENG321W	Shakespeare (3)
ENG350W	Seminar in Literary Theory and Scholarly Writing (3)
INTENG303	Internship (3)
ENG490	Integrative Capstone Seminar (3)

CHOOSE TWO UPPER-LEVEL ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

ENG302	Environmental Children's Fiction and Film (3)
ENG303	Food and American Identity (3)
ENG313	Special Topics (3)

ENG385	Toni Morrison Seminar (3)
ENG425	Bleak Houses: Shifting Landscapes in the English Novel (3)
ENG446	Wilderness and Literature (3)
ENG449	Exiles (3)
ENG429	The Literary Cookbook (3)

BA in English Interdisciplinary Major

An interdisciplinary major may be pursued through concentrated study in two related programs, culminating in a capstone that integrates 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 the program, particularly in the interrelations of the subjects to be studied. Students may select any of the following interdisciplinary options to pair with English: biology, business accounting, business economics, business management, business marketing, cultural studies, history, international business, mathematics, music, political science, and psychology.

REQUIRED COURSES

ENG204	World Literature (3)
ENG207	British Writers I (3)
ENG208	British Writers II (3)
ENG216W	American Writers I (3)
ENG321W	Shakespeare (3)
ENG287	African-American Writers (3)
ENG350W	Literary Theory and Sholarly Writing (3)

CHOOSE ONE UPPER-LEVEL ELECTIVE

OFFERINGS VARY; BELOW IS A SELECTION

ENG302	Environmental Children's Fiction and Film (3)
ENG303	Food and American Identity (3)
ENG313	Special Topics (3)
ENG385	Toni Morrison Seminar (3)
ENG425	Bleak Houses: Shifting Landscapes in the English Novel (3)
ENG434	Literature of Fact: Informing the World (3)
ENG446	Wilderness and Literature (3)
ENG449	Exiles (3)
ENG452	Ecofeminist Literature (3)
ENG427	Ethnicity and Place (3)
ENG429	The Literary Cookbook (3)
ENG480	August Wilson Seminar (3)

TO BE COMPLETED VIA CLOSE COORDINATION BETWEEN THE TWO INTERDISCIPLINARY PROGRAMS

INTENG303	Internship (3)
ENG490	Integrative Capstone Seminar (3)

History

The history program offers courses in African, American, Asian, European, Latin American, and Middle Eastern history that 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.

BA in History

29 credits

REQUIRED COURSES

HIS100	Introduction to World History (3)
HIS102	Introduction to American History (3)
HIS200W	Revolutions in Latin America (3) **OR**
HIS201W	Modern Middle East (3) **OR**
HIS202W	Modern Europe (3) **OR**
HIS204W	East Asian Studies (3) **OR**
HIS205W	Africa, Past and Present
HIS490	Integrative Capstone Seminar
POL311W	Research Methods (3)
INTHIS	Internship (3)

CHOOSE FOUR 200-LEVEL ELECTIVES

HIS213	Special Topics in History (3)
HIS215	Working-Class Radicals (3)
HIS216	Rise of the Third World (3)
HIS220	U.S. Women's History (3)
HIS224	The Holocaust (3)
HIS230	History of Social & Political Thought (3)
HIS231	History of the British Empire (3)
HIS234	Asian Foodways (3)
HIS241	History of Islam (3)
HIS247	American Environmental History (3)
HIS250	History of Christianity (3)
HIS257	The Sixties, Vietnam & America (3)
HIS258	History of Activism in Appalachia (3)
HIS263	Gender and the Family in America (3)
HIS270	U.S. and the Holocaust (3)
HIS283	Religious Movements in the Global South (3)

CHOOSE TWO 300-LEVEL ELECTIVES

HIS301	The Middle East and the United States (3)
HIS307	Oral History, Neighborhoods, and Race (3)
HIS309	Black Pittsburgh & Digital History (3)

HIS326	Arab-Israeli Conflict (3)
HIS328	Recent African History and NGO Networks (3)
HIS342	Post/Modern China: Digital Storytelling (3)
HIS351	Asian Migrations: Digital Storytelling (3)
HIS372	Curating African Art and Artifacts (3)

BA in History Interdisciplinary Major

An interdisciplinary major may be pursued through concentrated study in two related programs, culminating in a capstone that integrates 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 the program, particularly in the interrelations of the subjects to be studied. Students may select any of the following interdisciplinary options to pair with history: biology, business accounting, business economics, business management, business marketing, cultural studies, English, international business, mathematics, music, political science, and psychology.

REQUIRED COURSES

HIS100	Introduction to World History (3)
HIS102	Introduction to American History (3)
INT	Internship (3)

CHOOSE ONE

HIS200W	Revolutions in Latin America (3)
HIS201W	Modern Middle East (3)
HIS202W	Modern Europe (3)
HIS204W	East Asian Studies (3)
HIS205W	Africa, Past and Present (3)

CHOOSE TWO COURSES CONCENTRATING IN EUROPEAN, AMERICAN OR NON-WESTERN HISTORY

CHOOSE ONE 300-400 LEVEL SEMINAR

CHOOSE ONE PROGRAM ELECTIVE

Immersive Media

The BA in Immersive Media (IMM) is an interdisciplinary program that equips students with knowledge of design thinking, computer programming, interactive game design technology, creative methods, and cutting-edge hardware to create immersive experiences for a variety of applications and industries.

BA in Immersive Media

48 credits

REQUIRED COURSES

CMP120	Introduction to Programming (3)
IMM103	Introduction to Immersive Media (3)
IMM202	Introduction to Game Design (3)
IMM220	Studio I – 3D Interfaces & User Experience (3)

IMM240	Immersive Design Seminar (3)
IMM250	Human Centered Design (3)
IMM215	Programming for Immersive Experiences (3)
IMM311	Studio II – Architecture and Environments (3)
IMM325	Immersive Media Production: Environments (3)
IMM371	Studio III – Serious Play (3)
IMM406	Studio IV – Prototyping for Advanced Systems (3)
IMM425	Immersive Media Production: Access (3)
IMM456W	Studio V: Ethics and Access (3)
IMM470W	Immersive Design Research (3)
IMM490	Integrative Capstone (3)

CHOOSE ONE

ART261S	Web Design 1: Code + Aesthetics (3)
ART365S	Visual Communication (3)
FDT150S	Introduction to Digital Video Production (3)
FDT267S	Intro to Podcasting (3)
MUS205	Sound Recording Basics (3)
MUS262	Introduction to Computer Music (3)
IAR214	Digital Visualization I (3)

OR 3+ credit class with approval from department chair

Interior Architecture

The Bachelor of Interior Architecture (BIA) 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. This degree prepares students for practice in an interior design or architecture firm.

Bachelor of Interior Architecture

79 credits

REQUIRED COURSES

IAR105	Environment and Behavior (3)
IAR202	Theory of Interior Architecture (3)
IAR211	Design Fundamentals I (3)
IAR214	Digital Visualization 1 (3)
IAR215	Digital Visualization 2 (3)
IAR218	Building Codes (3)
IAR217	Interior Architecture I (3)
IAR219	Design Fundamentals II (3)
IAR220	Interior Architecture II (3)
IAR225	Interior Architecture III (3)
IAR230	Interior Materials (3)
IAR231	Green and Sustainable Design (3)
IAR261W	History of Interior Architecture: Prehistory to the 19th Century (3)
IAR262W	20th and 21st Century Architecture (3)
IAR310	Digital Visualization 3 (3)

IAR315	Construction Documents (3)
IAR316	Portfolio (3)
IAR321	Interior Architecture IV (3)
IAR326	Interior Architecture V (6)
IAR330	Construction Systems & Methods (3)
IAR335	Lighting and Acoustics (3)
IAR441	Environmental/Sustainable Community Service (1)
IAR445	Professional Practice (3)
IAR470	Immersive Design Research (3)
INTIAR303	Internship (3)
IAR490	Interior Architecture VI: Capstone (3)

International Studies

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 and cultural context. Completion of a regional certificate 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. The research methods, capstone seminar, and internship courses offer training in academic and applied project work that integrates humanistic study with practical knowledge.

Likely career fields for an international studies graduate 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.

BA in International Studies

36 credits

HIS100	World History (3)
FDT160	World Film History (3)
ENG204	World Literature (3)
POL100	Introduction to Comparative Politics (3) **OR**
POL104	Introduction to International Relations (3)
INT	Internship (3)
POL311W	Research Methods (3)
HIS490	Integrative Capstone Seminar (3)

COMPLETE AN INTERNATIONAL CERTIFICATE

15 credits consisting of language study, study abroad, or internship, and two approved electives

CHOOSE ONE, DEPENDING ON CERTIFICATE PROGRAM

HIS200W	Revolutions in Latin America (3)
HIS201W	Modern Middle East (3)
HIS202W	Modern Europe (3)
HIS204W	East Asian Studies (3)
HIS205W	Africa, Past and Present (3)

Mathematics

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.

BS in Mathematics

46 credits of required courses and 5 credits of restricted electives

REQUIRED COURSES

CMP120	Intro. to Programming (3)
MTH110	**Statistics**
MTH151	Calculus I (4)
MTH152	Calculus II (4)
MTH215W	Introduction to Proof (4)
MTH221	Linear Algebra (3)
MTH222	Multivar. & Vector Calc. (3)
MTH241	Differential Equations (3)
MTH327	Advanced Analysis (3)
MTH341	Abstract Algebra (3)
MTH490	Mathematics Capstone (3)
PHY251	Principles of Physics I (4)
PHY252	Principles of Physics II (4)
PHY255L	Physics I Lab (1)
PHY256L	Physics II Lab (1)
IND350W	**Scientific Research Methods (3)**

***Bold courses** count as General Education credits

CHOOSE ONE 200-LEVEL OR HIGHER MATHEMATICS ELECTIVE

BA in Mathematics

33 credits of required courses and 5 credits of restricted electives

REQUIRED COURSES

MTH110	**Statistics**
MTH151	Calculus I (4)
MTH152	Calculus II (4)
MTH215W	Introduction to Proof (4)
MTH221	Linear Algebra (3)

MTH222	Multivariant & Vector Calculus (3)
MTH327	Advanced Analysis (3) **OR**
MTH341	Abstract Algebra (3)
MTH490	Mathematics Capstone (3)
IND350W	**Scientific Research Methods (3)**

***Bold courses** count as General Education credits

CHOOSE THREE MATHEMATICS ELECTIVES

Media Arts

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.

BA in Media Arts

42 credits or 63 credits for dual concentrations

REQUIRED CORE COURSES

ART103	Introduction to Visual Culture (3) **OR**
CST183	Representations of Race and Gender (3)
ART210	History of Photography (3)
ART365S	Visual Communication (3)
FDT161	Introduction to Film, Video and New Media (3)
FDT300W	Critical Theory (3)
ART/FDT490	Integrative Capstone Seminar (3)

CHOOSE ONE WRITING INTENSIVE COURSE

ART230W	Women and Art (3)
ART309W	Art + Land (3)
COM234W	Persuasion (3)
COM260W	Public Relations (3)
COM310W	Environmental Communication (3)

Film & Digital Technology Concentration

REQUIRED COURSES

FDT150S	Introduction to Digital Video Production (3)
FDT350S	Intermediate Digital Video Production Studio (3)
FDT450S	Advanced Digital Video Production Studio (3)

CHOOSE TWO 200-LEVEL ELECTIVES

ART213	Special Topics (3)
ART220S	Material Studies Studio (3)

ART241S	Lighting Principles (3)
COM213	Special Topics (3)
FDT213	Special Topics (3)
FDT267S	Intro Podcasting (3)
FDT225	Female Narration (3)

CHOOSE TWO UPPER-LEVEL ELECTIVES

ART313	Special Topics (3)
COM313	Special Topics (3)
COM374	Documentary and Photojounalism (3)
FDT313	Special Topics (3)
FDT331	The Craft of Screenwriting (3)
FDT421S	Digital Animation and Compositing Modes (3)
FDT469S	Advanced Visual Effects (3)

Graphic Design Concentration

REQUIRED COURSES

ART117S	Drawing (3)
ART225S	Print Design Studio (3)
ART245S	Design Praxis (3)
ART261S	Web Design I: Code + Aesthetics (3)
ART321S	Typography Design Studio (3)
ART370S	Digital Illustration Methods (3)
ART489S	Portfolio (3)

Photography Concentration

REQUIRED COURSES

ART142S	Photography I: Black and White Darkroom (3)
ART152S	Photography II: Introduction to Digital Photography (3)
ART241S	Lighting Principles (3)
ART247S	Photography III: Advanced Digital Imaging (3)
ART388	Landscape Photography (3)
ART483S	Event Photography (3)
COM374S	Documentary and Photojournalism (3)

Graphic Design and Film & Digital Technology Dual Concentration

REQUIRED COURSES

ART117S	Drawing (3)
ART225S	Typography Design Studio (3)
ART245S	Design Praxis (3)
ART261S	Web Design I: Code + Aesthetics (3)
ART353S	Print Design Studio (3)
ART370S	Digital Illustration Methods (3)
ART489S	Portfolio (3)
FDT150S	Introduction to Digital Video Production (3)
FDT350S	Intermediate Digital Video Production Studio (3)
FDT450S	Advanced Digital Video Production Studio (3)

CHOOSE TWO 200-LEVEL ELECTIVES

ART220S	Material Studies Studio (3)
ART241S	Lighting Principles (3)
ART213	Special Topics (3)
COM213	Special Topics (3)
FDT213	Special Topics (3)
FDT225	Female Narration (3)
FDT267S	Podcasting (3)

CHOOSE TWO UPPER-LEVEL ELECTIVES

ART 313	Special Topics (3)
COM 313	Special Topics (3)
COM374	Documentary and Photojournalism (3)
FDT 313	Special Topics (3)
FDT331	The Craft of Screenwriting (3)
FDT421S	Digital Animation and Compositing Modes (3)
FDT469S	Advanced Visual Effects (3)

Graphic Design and Photography Dual Concentration

REQUIRED COURSES

ART117S	Drawing (3)
ART225S	Typography Design Studio (3)
ART142S	Photography I: Black and White Darkroom (3)
ART152S	Photography II: Introduction to Digital Photography (3)
ART241S	Lighting Principles (3)
ART245S	Design Praxis (3)
ART247S	Photography III: Advanced Digital Imaging (3)
ART261S	Web Design I: Code + Aesthetics (3)
ART370S	Digital Illustration Methods (3)
ART388	Landscape Photography (3)
ART483S	Event Photography (3)
ART489S	Portfolio (3)
COM374	Documentary and Photojournalism (3)

Photography and Film & Digital Technology Dual Concentration

REQUIRED COURSES

ART142S	Photography I: Black and White Darkroom (3)
ART152S	Photography II: Introduction to Digital Photography (3)
ART241S	Lighting Principles (3)
ART247S	Photography III: Advanced Digital Imaging (3)
ART388	Landscape Photography (3)
ART483S	Event Photography (3)
COM374	Documentary and Photojournalism (3)
FDT150S	Introduction to Digital Video Production (3)
FDT350S	Intermediate Digital Video Production Studio (3)
FDT450S	Advanced Digital Video Production Studio (3)

CHOOSE TWO 200-LEVEL ELECTIVES

ART220S	Material Studies Studio (3)
ART213	Special Topics (3)

COM213	Special Topics (3)
FDT213	Special Topics (3)
FDT267S	Podcasting (3)
FDT225	Female Narration (3)

CHOOSE TWO UPPER-LEVEL ELECTIVES

ART313	Special Topics (3)
COM313	Special Topics (3)
FDT313	Special Topics (3)
FDT331	The Craft of Screenwriting (3)
FDT421S	Digital Animation and Compositing Modes (3)
FDT469S	Advanced Visual Effects (3)

Music

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 capstone, and participation in the Chatham Choir and Instrumental Ensembles. Students have opportunities to study privately with active professional musicians 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.

BA in Music

12 courses

REQUIRED COURSES

MUS159	**Music Fundamentals (3)**
MUS161	Music Theory and Analysis I (4)
MUS252	Music Theory and Analysis II (4)
MUS267W	History of Music I (3)
MUS365	Advanced Music Theory and Analysis (3)
MUS368W	History of Music II (3)
MUS490	Integrative Capstone Seminar (3)

***Bold courses** count as General Education credits

CHOOSE FOUR APPLIED MUSIC OR COMPOSITION COURSES (MUA)

CHOOSE ONE ELECTIVE

MUS150	History of Rock, Pop, and Soul (3)
MUS174	Jazz Survey (3)
MUS205	Sound Recording Basics (3)
MUS210	Music & the Natural World (3)
MUS262	Introduction to Computer Music (3)
MUS266	World Music (3)

Music Business

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.

BA in Music Business

17 courses

REQUIRED COURSES

ACT222	Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	**Business Analytics ((3)**
BUS243	Principles of Marketing (3)
BUS452	Managing Nonprofit Orgnizations (3)
FDT261	Web Design I (3)
MUAXXX	Applied music or composition (2-3)
MUAXXX	Applied music or composition (2-3)
MUS159	**Music Fundamentals**
MUS161	Music Theory and Analysis I (4)
MUS163	Intro to Music Business (3)
MUS205	Sound Recording Basics (3)
MUS262	Introduction to Computer Music (3)
MUS350	Legal Issues in Music Performance/Production (3)
MUS490	Integrative Capstone (3)

***Bold courses** count as General Education credits

CHOOSE TWO

MUS252	Music Theory and Analysis II (3)
MUS267W	History of Music I (3)
MUS365	Advanced Music Theory and Analysis (3)
MUS368W	History of Music II (3)

Music Technology

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

BA in Music Technology

16 courses

CMP120	Introduction to Programming (3)
FDT150	Intro to Digital Video Production (3)
FDT261	Web Design I (3)
MUAXXX	Applied music or composition (2-3)
MUAXXX	Applied music or composition (2-3)
MUS159	**Music Fundamentals (3)***
MUS161	Music Theory and Analysis I (4)
MUS252	Music Theory and Analysis II (4)
MUS205	Sound Recording Basics (3)
MUS262	Introduction to Computer Music (3)
MUS267W	History of Music I (3)
MUS368W	History of Music II (3)
MUS351	Audio Production (3)
MUS352	Advanced Computer Music (3)
MUS365	Advanced Music Theory and Analysis (3)
MUS490	Integrative Capstone (3)

***Bold courses** count as General Education credits

Neuroscience

Neuroscience combines theoretical and methodological approaches from biology, chemistry, and psychology to explore the nervous system. This interdisciplinary major addresses foundational and emerging principles in the field through examination at the molecular, cellular, organismal, and social levels, in addition to providing students with a broad interdisciplinary base in scientific knowledge. Course and career preparation are covered in the program. This program is designed for students who plan to enter a neurosciences graduate program or professional medical program (e.g., medicine), and for those interested in careers in biotechnology, biomedical research, or related areas.

BS in Neuroscience

54 credits of required courses and 7 credits counted as general education

REQUIRED COURSES

BIO143	The Cell (3)
BIO143L	The Cell Lab (1)
BIO144	The Organism (3)
BIO144L	The Organism Lab (1)
BIO209	Basic Neuroscience (3)
BIO209LW	Basic Neuroscience Lab (2)
BIO231	Cell and Molecular (3)
BIO319	Experimental Neuroscience (3)
BIO423	Neurobiology of Mental Health (3)
BIO487	Neuropathology (3)
BIO490	Biology Capstone (3)
CHM107	**Chemistry I**

CHM108	Chemistry II (3)
CHM109L	**Chemistry I Lab**
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM215L	Elementary Organic Chemistry Lab (2)
IND200W	Introduction to Scientific Research (2)
IND350W	**Scientific Research Methods (3)**
MTH110	**Statistics**
MTH151	Calculus 1 (4)
PSY101	Intro to Psychology (3)
PSY307	Cognitive Psychology (3)

CHOOSE ONE ELECTIVES

PSY230	Animal Behavior (3)
PSY326	Learning and Memory (3)
PSY328	Sensation and Perception
PSY331	Social Psychology (3)
PSY333	Fundamentals of Psychopathology (3)
PSY340	Psychopharmacology (3)
PSY341	Psychobiology (3)
PSY342	Addiction (3)
PSY351	Childhood and Adolescence (3)
PSY352	Adult Development (3)

Policy Studies

The policy studies major 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.

BA in Policy Studies

60 credits

REQUIRED CORE COURSES

BUS110	Business Analytics I (3) **OR**
MTH110	Elementary Statistics (3) **OR**
PSY213	Stats and Research Design (3)
ECN101	Principle of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ECN355	Economic Analysis and Public Policy (3)
HIS100	Introduction to World History (3) **OR**
HIS102	History of American Society (3)
POL100	Comparative Politics (3) **OR**
POL101	American Government & Public Policy (3)
POL202W	Understanding Public Policy (3)
INT	Internship (3)

POL311W	Selected Topics in Social Science Research (3)
POL/HIS490	Integrative Capstone Seminar (3)

US Domestic Policy Concentration

CHOOSE FIVE COURSES

BUS210	US Labor Relations, Labor Policy, and Worker Rights (3)
CRM224	Juvenile Justice (3)
FST315	Food Access and Policy (3)
HIS215	Industry and the Working Class in Europe and America (3)
HIS220	US Women's History (3)
POL246	State and Local Government (3)
POL262	Women and Politics (3)
POL300	US Congress (3)
POL303	Constitutional Law (3)
SWK321	Social Welfare Policy (3)
SWK322W	Social Welfare: Women and Policy (3)

International Policy Concentration

CHOOSE FIVE COURSES

ECN351	International Trade and Finance (3)
ECN358	Economic Development (3)
HIS216	Rise of the Third World (3)
HIS228	Recent African History (3)
POL302	Ethnic Conflict (3)
POL219W	International Organizations (3)
POL319	Politics of the European Union (3)
POL324	US Foreign Policy (3)

Environmental Policy Concentration

CHOOSE FIVE COURSES

ECN262	Global Environmental Economics (3)
POL268	Environmental Policy (3)
HIS 247	American Environmental History (3)
SUS 330	Sustainable Cities (3)
SUS 335	Renewable Energy and Society (3)
SUS 401	Sustainability Policy and Decision Making (3)
SUS 460	Energy Policy for Sustainability (3)
SUS 470	Corporate Social Responsibility (3)

BA in Policy Studies Interdisciplinary Major

Students must select a second interdisciplinary program and a single Capstone must integrate the subject matter of the two programs.

8 courses

REQUIRED COURSES

ECN101	Principle of Macroeconomics (3) **OR**
ECN102	Principles of Microeconomics (3)
POL100	Comparative Politics (3) **OR**
POL101	American Government & Public Policy (3)

POL202W Understanding Public Policy (3)
ECN355 Economic Analysis and Public Policy (3)
POL311W Research Methods (3)

CHOOSE ONE 200-LEVEL HISTORICAL ANALYSIS COURSE

HIS216 Rise of the Third World (3)
HIS228 Recent African History (3)
HIS247 American Environmental History (3)
HIS342 (Post) Modern China (3)
OR substitute approved by program director

CHOOSE ONE 300-LEVEL POLITICAL ANALYSIS COURSE

POL300 U.S. Congress (3)
POL302 Ethnic Conflict (3)
POL319 Politics of the European Union (3)
POL324 U.S. Foreign Policy (3)
SWK/WST322W Women and Policy (3)
OR substitute approved by program director

CHOOSE ONE ECONOMIC OR POLITICAL ANALYSIS COURSE

ECN250 Women and Work (3)
ECN253 Economic Development
ECN262 Environmental Economics (3)
ECN351 International Trade and Finance (3)
POL219W International Organizations (W)
POL262 Women and Politics (3)
POL300 U.S. Congress (3)
POL302 Ethnic Conflict (3)
POL319 Politics of the European Union (3)
POL324 U.S. Foreign Policy (3)
SWK/WST322W Women and Policy (3)
OR substitute approved by program director

Political Science

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 civically focused 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 the Pennsylvania Center for Women and Politics (e.g.: Public Leadership Education Network (PLEN)).

BA in Political Science

33 credits

REQUIRED COURSES

POL100	Introduction to Comparative Politics **OR**
POL104	International Relations (3)
POL101	American Government and Public Policy (3)
POL202W	Understanding Public Policy (3)
POL311W	Research Methods (3)
INTPOL	Internship (3)
POL490	Integrative Capstone Seminar (3)

CHOOSE THREE 200-LEVEL ELECTIVES

POL202W	Understanding Public Policy (3)
POL213	Special Topics (3)
POL217	European Identities (3)
POL219W	International Organizations (3)
POL229	Campaigns and Elections (3)
POL230	Civic Engagement (3)
POL234	Non-Profits and Policy Activism (3)
POL246	State and Local Government (3)
POL262	Women and Politics (3)
POL268	Environmental Policy (3)

CHOOSE TWO 300-LEVEL OR ABOVE ELECTIVES

POL300	The U.S. Congress (3)
POL302	Ethnic Conflict (3)
POL303	Constitutional Law I: US Govt Powers/Relationships (3)
POL311W	Selected Topics in Social Science Research (3)
POL313	Special Topics (3)
POL319	Politics of the European Union (3)
POL320	Politics of the Former Soviet Union (3)
POL324	U.S. Foreign Policy (3)
POL340	Political Psychology (3)

BA in Political Science Interdisciplinary Major

8 courses exclusive of the integrative capstone

REQUIRED COURSES

POL100	Introduction to Comparative Politics **OR**
POL104	International Relations (3)
POL101	American Government and Public Policy (3)
POL311W	Research Methods (3)
INT	Internship (3)

CHOOSE THREE 3-CREDIT 200-LEVEL ELECTIVES

CHOOSE ONE 3-CREDIT 300-LEVEL OR ABOVE ELECTIVE

Psychology

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.

BA In Psychology
BA in Psychology Interdisciplinary Major

11 courses

REQUIRED COURSES

PSY101	General Psychology (3)
PSY213	Statistics and Research Design (3)
PSY217W	Critical Thinking in Psychology (3)
PSY314W	Foundations in Behavioral Research (3)
PSY490	Integrative Capstone Experience (3)

CHOOSE ONE COGNITION COURSE

PSY307	Cognitive Psychology (3)
PSY324	Motivation (3)
PSY326	Learning and Memory (3)
PSY 328	Sensation and Perception (3)

CHOOSE ONE INDIVIDUAL DIFFERENCES, PERSONALITY, AND SOCIAL PSYCHOLOGY COURSE

POL340	Political Psychology (3)
PSY323	Personality (3)
PSY331	Social Psychology (3)
PSY333	Fundamentals of Psychopathology (3)
PSY356	Forensic Psychology (3)

CHOOSE ONE BIOLOGICAL BASIS COURSE

PSY230	Animal Behavior (3)
PSY340	Psychopharmacology (3)
PSY341	Psychobiology (3)
PSY342	Addiction (3)

CHOOSE ONE DEVELOPMENTAL COURSE

PSY351	Childhood and Adolescence (3)
PSY352	Adult Development (3)
PSY357	Adolescence and the Transition to Adulthood (3)

CHOOSE TWO ADDITIONAL PSYCHOLOGY ELECTIVES

*PSY251 cannot be used to fulfill any psychology major requirements

Social Work

The Chatham Bachelor of Social Work program is accredited by the Council on Social Work Education, ensuring high educational standards through a rigorous peer-review process. This accreditation allows graduates to qualify for advanced standing in accredited Master of Social Work (MSW) programs, potentially completing an MSW in just one year or less, and to sit for professional bachelor-level social work licensure. The curriculum is designed to provide students with the foundational knowledge, skills, and ethical principles necessary for effective generalist practice in the field of social work. The program combines theory, research, applied learning, and hands-on experience to prepare students for working with individuals, families, communities, and organizations. The major course work includes three introductory courses, a human behavior course, two social welfare policy courses, four advanced social work practice courses, a two-course research sequence, and the integrated capstone experience. In addition to coursework, students complete a 12-credit, 500 hour field placement during the senior year. One of the most critical components of the curriculum is the field placement where are placed in social service settings, where they gain practical experience working directly with clients and social service agencies under the supervision of licensed social workers and our field placement coordinator. Students are also encouraged to participate in the Chatham Social Work Club and our chapter of Phi Alpha, the social work honor society.

BA in Social Work

PSY101	General Psychology (3)
PSY314W	Foundations of Behavioral Research (3)
SWK101	Introduction to Sociology (3)
SWK102	Introduction to Social Work, Social Justice and Social Issues (3)
SWK201W	Human Behavior in Social Environment (3)
SWK321	Social Welfare Policy (3)
SWK322W	Social Welfare: Women and Policy (3)
SWK351	Interviewing and Assessment with Individuals (3)
SWK352	Interventions with Individuals and Families (3)
SWK354	Practice with Groups (3)
SWK355	Practice with Organizations and Communities (3)
SWK490	Integrative Capstone Seminar (3)

12 CREDITS OF FIELD PLACEMENT

SWK451a	Field Placement (1)
SWK451b	Field Placement (2)
SWK451c	Field Placement (3)
SWK451d	Field Placement (4)
SWK451e	Field Placement (5)

Visual Arts

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, critical theory, and historical awareness; 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 plays in all facets of contemporary life. Concentrations are available in art history and studio art.

BA in Visual Arts:

15 courses

REQUIRED CORE COURSES

ART103	Introduction to Visual Culture (3)
ART117S	Drawing I (3)
ART132	History of World Art II: 1400 to Present (3)
ART214S	Design Studio (3)
ART230W	Women and Art (3) **OR**
ART309W	Art + Land (3)
ART254	Modern Art, 1900 to Present **OR**
ART328	The Carnegie International (3)
ART313	Special Topics (3)
ART490	Integrative Capstone Seminar (3)
FDT300W	Critical Theory (3)

Art History Concentration

REQUIRED COURSES

ART131	History of World Art: Prehistory to 1400 (3)
ART208	Introduction to Museum Studies (3) **OR**
ART368	Museum Education (3)
ART231	Italian Renaissance Art: Creating the Modern West (3) **OR**
ART234	The Baroque: Art and Propaganda (3)
ART248	19th Century Europe: Art and Revolution (3) **OR**
ART366	American Art to 1900: Who We Are (3)
ART271	Asian Art (3)
ART372	Curating African Art and Artifacts (3)

Studio Art Concentration

REQUIRED COURSES

ART111S	Ceramics (3)
ART115S	Painting (3)
ART127S	Printmaking (3)
ART205S	Sculpture (3)

CHOOSE ONE 3D STUDIO ELECTIVE

ART205S/305S/405S	Sculpture Studio (3)
ART211S/311S/411S	Ceramics Studio (3)
ART220S/320S/420S	Material Studies Studio (3)

CHOOSE ONE 2D STUDIO ELECTIVE

ART215S/315S/415S	Painting Studio (3)
ART217S/317S/417S	Drawing Studio (3)
ART227S/327S/427S	Printmaking Studio (3)

Women's and Gender Studies

The women's and gender studies major offers students the opportunity for the interdisciplinary study of women, transgender, and gender diverse individuals' contributions to society and women's experience in diverse cultures, polities, and historical periods. Students seek to understand the new 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, 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.

BA in Women's and Gender Studies

12 courses

REQUIRED COURSES

WGS101	Intro to Women's & Gender Studies (3)
WGS201W	Feminist Theory (3)
WGS322W	Social Welfare: Women and Policy (3)
INTWGS303	Service Internship (3)
WGS490	Integrative Capstone Seminar (3)

CHOOSE ONE RESEARCH SEMINAR

ENG350W	Research Seminar in appropriate area (3)
POL311W	Selected Topics in Social Science Research (3)
BUS310W	Business Analytics II (3)
PSY314W	Foundations of Behavioral Research (3)

CHOOSE SIX ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

ART213	Social Justice & Art (3)
ART230W	Women and Art (3)
BIO218	Women's Health Issues (3)
CRM220	Women and the Criminal Justice System (3)
CST183	Representations of Race and Gender (3)
CST215	Perspectives in Queer Theory (3)
ENG220	Gender and Sexuality in Speculative Fiction (3)
ENG262	Introduction to Women Writers (3)
ENG385	Toni Morrison Seminar (3)
FDT225	Female Narration (3)
HIS220	US Women's History (3)
IND247	Intergroup Dialogue Seminar on Gender (3)

MUS105	History of Rock, Pop, and Soul (3)
PHI218	Ethics and Women's Issues (3)
PHI241	Love, Sex, and Friendship (3)
PHI300	Womanist and Liberation Theology (3)
POL262	Women and Politics (3)
PSY236	Psychology of Women (3)
SWK102	Intro to Social Issues, Women, and Social Work (3)
SWK321	Social Welfare Policy (3)
WGS202	Women's Leadership in the 21st Century (3)
WGS210	Narratives of Girlhood: Perils and Possibilities (3)
WGS365	Gendered Resistance, Riots, and Rebellions (3)

UNDERGRADUATE MINORS

African American Studies Minor

This interdisciplinary program 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.

REQUIRED COURSES

CST183	Representations of Race and Gender (3)
ENG287	African American Writers (3)
HIS360	History of Panafricanism (3)

CHOOSE ONE COURSE IN HISTORY

HIS284	African Americans in the U.S. Civil War and Reconstruction (3)
HIS205	Africa, Past and Present (3)
HIS220	US Women's History (3)
HIS228	Recent African History (3)
HIS285	African-American History (3)
HIS307	Oral History, Neighborhoods, and Race (3)
HIS313	Special Topics (3)
HIS328	Recent African History and NGO Networks (3)

CHOOSE ONE COURSE IN LITERATURE

CST313	Special Topics (3)
ENG282	20th century African American Literature (3)
ENG238	Harlem Renaissance (3)
ENG313	Special Topics (3)
ENG385	Toni Morrison Seminar (3)

CHOOSE ONE COURSE IN ART, MUSIC, AND/OR FILM

ART313	Special Topics (3)
ART372	Curating African Art and Artifacts (3)
FDT313	Special Topics (3)
FDT186	Introduction to Black Filmmaking (3)
FDT225	Female Narration: Race and Gender in Women's Films (3)
MUS150	History of Rock, Pop and Soul (3)
MUS174	Jazz Survey (3)
MUS313	Special Topics (3)

Art Museum Studies Minor

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 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 Susan Bergman Gurrentz ’56 Art Gallery and Chatham’s art collections.

REQUIRED COURSES

ART208	Introduction to Art Museum Studies (3)
ART368	Museum Education and the Visual Arts (3)
ART372	Curating African Art (3)
ART378	Curating the Visual Arts (3)
INTART303	Internship (3)

CHOOSE ONE ELECTIVE

ART213	Special Topics (3)
ART313	Special Topics (3)
ART328	The Carnegie International (3)

Communications Minors

Communications: Journalism Minor

6 courses

CHOOSE ONE

ART225	Typography Design Studio (3)
ART245	Design Praxis (3)
COM213	Special Topics (3)
COM313	Special Topics (3)

CHOOSE ONE

ART261S	Web Design I: Code + Aesthetics (3)
FDT267	Intro to Podcasting (3)

CHOOSE ONE

COM374	Photography V: Documentary and Photojournalism (3)
ART483	Event Photography (3)

CHOOSE ONE

FDT150	Introduction to Digital Video Production (3)
ART142	Black & White Photography (3)
ART152	Photography II: Introduction to Digital Photography (3)

CHOOSE TWO

COM251	Newswriting and Editing (3)
COM255	The Communiqué Newsroom I (3)

COM256 The Communiqué Newsroom II (3)
COM351 Advanced News Writing & Editing (3)

Communications: Public Relations Minor

6 courses

CHOOSE THREE

COM213 Special Topics (3) **OR**
COM313 Special Topics (3)
COM260W Practical Public Relations (3)
COM264 Strategic Communication Agency (3)
COM314 Careers in Strategic Communication (3)
COM360 Advanced Public Relations (3)

CHOOSE THREE

ART152 Photography II: Introduction to Digital Photography (3)
ART245 Design Praxis (3)
ART247 Photography III: Advanced Digital Imaging (3)
ART261 Web Design I: Code + Aesthetics (3)
FDT150 Introduction to Digital Video Production (3)
FDT267 Intro to Podcasting (3)

Creative Writing Minor

The creative writing minor draws upon the strengths of the undergraduate English program and the graduate faculty of the Master of Fine Arts in Creative Writing program. Students choosing this minor may be interested in a graduate degree in creative writing or career in professional writing, or in augmenting a major in immersive media.

6 courses

REQUIRED COURSES

ENG100 Intro to Literary Studies (3)
ENG242 Intro to Creative Writing (3)
ENG243 Creative Writing I (3)
ENG244 Creative Writing II (3)

CHOOSE TWO

ART261 Web Design 1: Code + Aesthetics (3)
COM251 News Writing and Editing (3)
COM351 Advanced News Writing and Editing (3)
COM255 The Communique Newsroom I (3)
COM374 Documentary and Photojournalism (3)
ENG310 Summer Community of Writers (3)
ENG355 Advanced Writing & Stylistics (3)
ENG364 Writing Poetry (3)
ENG365 Writing Prose (3)
ENG366 Writing Nonfiction (3)
ENG367 Writing Genres (3)

ENG513	Writing About Food (3)
ENV327	Writing About Environmental Science (3)
FDT150	Introduction to Digital Video Production (3)
FDT267	Intro to Podcasting (3)
FDT331	Craft of Screenwriting (3)
FDT421	Digital Animation And Compositing (3)
FST515	Writing About Food (3)

Other 500-level graduate courses as approved by MFA Program Director

Criminology Minor

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 BA degrees in psychology and social work available at Chatham.

15 credits

REQUIRED COURSES

CRM101	Introduction to Criminal Justice (3)
CRM225W	Criminology (3)

CHOOSE THREE ELECTIVES

CRM220	Women and the Criminal Justice System (3)
CRM/SWK224	Juvenile Justice and Child Welfare (3)
CRM305	Law Enforcement and Criminal Investigations (3)
CRM310	Survey of Corrections (3)
CRM313	Special Topics (3)
CRM320	Criminalization of Mental Illness (3)
CRM332	History of Crime and Punishment (3)
CRM340	Violent and Predatory Crimes (3)
CRM/PSY362	What is Evil? (3)
PSY356	Forensic Psychology (3)

OR substitute courses approved by program coordinator

Dance Minor

A minor in dance offers students the opportunity to develop skills that will complement many other fields of study.

18 credits

REQUIRED COURSES

DAN101	World of Dance (3)
DAN121	Contemporary Dance Technique I (3)
DAN213	Special Topics (3) **OR**
DAN313	Special Topics (3)
DAN239	Dance Performance (3)
DAN305	Choreography (3)

CHOOSE ONE ELECTIVE

DAN125	Folk and Ethnic Dance (3)
DAN160	Rhythms Beyond Borders (3)
DAN493	Independent Study (3)

English Minor

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.

18 credits

REQUIRED COURSE

ENG100	Introduction to Literary Studies (3)

CHOOSE THREE 200-LEVEL LITERATURE COURSES

ENG200	Frankenstein: Creation of Culture (3)
ENG204	World Literature (3)
ENG207	British Writers I (3)
ENG208	British Writers II (3)
ENG213	Special Topics (topics vary) (3)
ENG216W	American Writers I (3)
ENG220	Gender and Sexuality in Speculative Fiction (3)
ENG262	Introduction to Women Writers (3)
ENG282	20th-Century African American Literature (3)
ENG283	Harlem Renaissance (3)
ENG287	African-American Writers (3)

CHOOSE TWO 330-400 LEVEL LITERATURE COURSES

ENG302	Environmental Children's Literature and Film (3)
ENG303	Food and American Identity (3)
ENG313	Special Topics (topics vary) (3)
ENG321W	Shakespeare Survey (3)
ENG385	Toni Morrison Seminar (3)
ENG413	Special Topics (3)
ENG425	Bleak Houses: Shifting Landscapes of the English Novel (3)
ENG429	The Literary Cookbook (3)
ENG446	Wilderness and Literature (3)
ENG449	Exiles (3)

Environmental Writing Minor

16 credits

REQUIRED COURSES

BIO129	Our Fragile Earth (3)
BIO129L	Our Fragile Earth Lab (1)
ENV116	Global Environmental Challenges (3) or
ENV247	Environmental Geology
ENV327W	Writing About Environmental Science (3)
ENV242	Women and the Global Environment (3)

CHOOSE ONE ELECTIVE

ENG302	Environmental Children's Literature and Film (3)
ENG584	The Environmental Imagination* (3)
ENG585	Travel Writing* (3)

*With graduate instructor and program permission

French Minor

Students who declare a French minor will study the language as well as the cultural contexts of the language.

Prerequisites are introductory-level proficiency in French. This is equivalent to the completion of the introductory French course sequence (LNG 131 and LNG 132 plus LNG 131Lab and LNG 132Lab). Students proficient in the language may be exempted based on Chatham placement scores.

5 courses and 2 labs

REQUIRED COURSES

ENG209	Linguistics (3)
LNG231	Intermediate French I (3)
LNG231L	Intermediate French I Lab (1)
LNG232	Intermediate French II (3)
LNG232L	Intermediate French II Lab (1)

TWO UPPER-LEVEL LANGUAGE OR CULTURE ELECTIVES
TAKEN AT CHATHAM, A PCHE SCHOOL, OR PARTNER INSTITUTION ABROAD

Chatham Electives

ART234	Baroque and Rococo Art (3)
ART248	19th-Century Art (3)
HIS202W	Modern Europe (3)
POL217	European Identities (3)
POL319	Politics of the European Union (3)
LNG313	Special Topics (3)
LNG 331	French Grammar, Composition, and Conversation (3)

German Minor

Students who declare a German minor will study the language as well as the cultural contexts of the language.

Prerequisites are introductory-level proficiency in German. This is equivalent to the completion of the introductory French course sequence (LNG 141 and LNG 142 plus LNG 141Lab and LNG 142Lab). Students proficient in the language may be exempted based on Chatham placement scores.

5 courses and 2 labs

REQUIRED COURSES

ENG209	Linguistics (3)
LNG231	Intermediate German I (3)
LNG231L	Intermediate German I Lab (1)
LNG232	Intermediate German II (3)
LNG232L	Intermediate German II Lab (1)

TWO UPPER-LEVEL LANGUAGE OR CULTURE ELECTIVES TAKEN AT CHATHAM, A PCHE SCHOOL, OR PARTNER INSTITUTION ABROAD

Chatham Electives

HIS202W	Modern Europe (3)
HIS224	The Holocaust (3)
LNG313	Special Topics (3)
LNG241	German Grammar, Composition, and Conversation (3)
POL217	European Identities (3)
POL319	Politics of the European Union (3)

History Minor

The history program offers courses in African, American, Asian, European, Latin American, and Middle Eastern history that 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.

6 courses

CHOOSE TWO

HIS100	Introduction to World History (3)
HIS102	Introduction to American History (3)
HIS200W	Revolutions in Latin America (3)
HIS201W	Modern Middle East (3)
HIS202W	Modern Europe (3)
HIS204W	East Asian Studies (3)
HIS205W	Africa, Past and Present (3)

CHOOSE THREE 200-LEVEL COURSES

CHOOSE ONE 300-LEVEL COURSE

Holocaust, Genocide & Human Rights Minor

The Holocaust, genocide & human rights 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.

18 credits

REQUIRED COURSES

HIS202W	Modern Europe (3)
HIS224	The Holocaust (3)
HIS270	The United States & the Holocaust (3)
SSC121	Intro to Genocide Studies (3)

CHOOSE ONE

CRM362	What is Evil? (3)
POL302	Ethnic Conflict (3)

CHOOSE ONE

EDU448	Teaching the Holocaust (3)
ENG449	Exiles (3)

Jewish Studies Minor

This minor is an interdisciplinary study of Jewish history, literature, religion, culture, and art.

18 credits

CST120	Intro to Jewish Studies (3)
ENG449	Exiles (3)
HIS224	The Holocaust (3)
HIS252	History of Judaism (3)
HIS326	Arab-Israeli Conflict (3)
SSC219	American Jewish Experience (3)

Media Arts Minors

Media Arts: Film & Digital Technology

18 credits

REQUIRED COURSES

ART241S	Lighting Principles (3)
FDT150S	Introduction to Digital Video Production (3)
FDT350S	Intermediate Digital Video Production Studio (3)
FDT421S	Digital Animation and Compositing Modes (3)
FDT450S	Advanced Digital Video Production Studio (3)

CHOOSE ONE ELECTIVE

ART213	Special Topics (3)
ART313	Special Topics (3)
COM213	Special Topics (3)
COM313	Special Topics (3)
FDT161	Introduction to Film, Video, and New Media (3)
FDT213	Special Topics (3)
FDT267S	Podcasting (3)
FDT313	Special Topics (3)
FDT331	The Craft of Screenwriting (3)
FDT469S	Advanced Visual Effects (3)

Media Arts: Graphic Design

18 credits

REQUIRED COURSES

ART225S	Typography Design Studio (3)
ART245S	Design Praxis (3)
ART353S	Print Design Studio (3)
ART365S	Visual Communication (3)
ART370S	Digital Illustration (3)
ART489S	Portfolio (3)

Media Arts: Photography

18 credits

REQUIRED COURSES

ART142S	Photography I – Black & White Darkroom (3)
ART152S	Photography II – Introduction to Digital Photography (3)
ART241S	Lighting Principles (3)
ART247S	Photography III: Advanced Digital Imaging (3)
ART388S	Landscape Photography (3)

CHOOSE ONE

ART210	History of Photography (3)
ART213	Special Topics (3)
ART313	Special Topics (3)
ART483S	Event Photography (3)
COM213	Special Topics (3)
COM313	Special Topics (3)
COM374	Documentary and Photojournalism (3)
FDT213	Special Topics (3)
FDT313	Special Topics (3)

Music Minor

6 courses

REQUIRED COURSE

MUS159	Music Fundaments (3)

CHOOSE TWO 3-4 CREDIT MUS COURSES

CHOOSE THREE 2-4 CREDIT MUA OR MUS COURSES

Music Business Minor

6 courses

MUS159	Music Fundamentals (3)
MUS161	Music Theory and Analysis I (4)
MUS163	Intro to Music Business (3)
MUS205	Sound Recording Basics (3)
MUS262	Introduction to Computer Music (3)
MUS350	Legal Issues in Music Performance/Production (3)

Music Technology Minor

6 courses

MUS159	Music Fundamentals (3)
MUS161	Music Theory and Analysis I (4)
MUS205	Sound Recording Basics (3)
MUS262	Introduction to Computer Music (3)
MUS351	Audio Production (3)
MUS352	Advanced Computer Music (3)

Philosophy Minor

The philosophy minor 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.

6 courses

REQUIRED COURSES

PHI113	Introduction to Philosophy (3)
PHI121	Introduction to Logic (3)

CHOOSE FOUR ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

PHI210	Biomedical Ethics (3)
PHI213	Special Topics (3)
PHI218	Ethics and Women's Issues (3)

PHI225	Environmental Ethics (3)
PHI241	Love, Sex, and Friendship (3)
PHI300	Womanist and Liberation Theology (3)

Physics Minor

The physics minor aids in preparation for the workforce in terms of breadth of knowledge and problem solving with applications. Students take first-year physics requirements and mathematics courses at Chatham; upper-level physics electives are taken at other area institutions through the PCHE agreement.

19-22 credits

REQUIRED COURSES

MTH151	Calculus I (4)
PHY251	Principles of Physics I (4)
PHY255L	Physics Laboratory I (1)
PHY252	Principles of Physics II (4)
PHY256L	Physics Laboratory II (1)

CHOOSE 5-8 CREDITS OF ELECTIVES

CHM311	Physical Chemistry I (3)
PHY492/PHY493	Independent Study (2/3)
PIT-PHYS0477	Principles of Modern Physics I (4)
PIT-PHYS0481	Principles of Modern Physics II (3)
PIT-PHYS0520	Modern Physics Measurements (3)
PIT-PHYS0525	Analog and Digital Electronics (3)
PIT-PHYS1331	Mechanics (3)
PIT-PHYS1341	Thermodynamics and Statistical Physics (3)
PIT-PHYS1351	Intermediate Electricity and Magnetism (3)
PIT-PHYS1375	Foundations of Nanoscience (3)
PIT-PHYS1376	Introduction to Biophysics (3)
PIT-ASTRON0113	Introduction to Astronomy (3)
PIT-ASTRON1263	Techniques of Astronomy (3)

OR any course in physics approved in advance.

Political Science Minor

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 the Pennsylvania Center for Women and Politics (e.g.: Public Leadership Education Network (PLEN)).

6 courses

REQUIRED COURSES

POL100	Introduction to Comparative Politics **OR**
POL104	International Relations (3)
POL101	American Government and Public Policy (3)

CHOOSE THREE 3-CREDIT 200-LEVEL ELECTIVES

CHOOSE ONE 3-CREDIT 300-LEVEL OR ABOVE ELECTIVE

Pre-Law Minor

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 Pennsylvania Center for Women and Politics, and the support of an advisory committee.

5 courses

COM234	Persuasion 1 (3)
ENG241	Business Writing (3) **OR**
ENG355	Advanced Writing (3)
PHI121	Introduction to Logic (3)
POL303	Constitutional Law I (3)
IND104	Preparing for the LSAT (2)

Psychology Minor

The psychology curriculum enables students to think scientifically about behavior and mental processes, to appreciate and respect others. This minorr 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.

6 courses

REQUIRED COURSES

PSY101	General Psychology (3)

CHOOSE ONE COGNITION COURSE

PSY307	Cognitive Psychology (3)
PSY324	Motivation (3)
PSY326	Learning and Memory (3)
PSY 328	Sensation and Perception (3)

CHOOSE ONE INDIVIDUAL DIFFERENCES, PERSONALITY, AND SOCIAL PSYCHOLOGY COURSE

POL340	Political Psychology (3)
PSY323	Personality (3)
PSY331	Social Psychology (3)
PSY333	Fundamentals of Psychopathology (3)
PSY356	Forensic Psychology (3)

CHOOSE ONE BIOLOGICAL BASIS COURSE

PSY230	Animal Behavior (3)
PSY340	Psychopharmacology (3)
PSY341	Psychobiology (3)
PSY342	Addiction (3)

CHOOSE ONE DEVELOPMENTAL COURSE

PSY351	Childhood and Adolescence (3)
PSY352	Adult Development (3)
PSY357	Adolescence and the Transition to Adulthood (3)

CHOOSE ONE ADDITIONAL PSYCHOLOGY ELECTIVE

Social Services Administration Minor

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.

6 courses

REQUIRED COURSES

BUS 105	Foundations of Business (3)
BUS452	Managing Non-Profits (3)
SWK101	Introduction to Sociology (3) **OR**
PSY101	General Psychology (3)
SWK102	Introduction to Social Issues, Social Justice and Social Work (3)
SWK321	Social Welfare Policy (3)

CHOOSE ONE

ACT222	Accounting (3)
BUS171	Information Systems and Operations (3)
BUS230W	Organizational Behavior (3)
BUS257	Business Law & Business Ethics (3)
BUS 272	Principles of Finance (3)
SWK322W	Social Welfare: Women and Policy (3)
SWK351	Interviewing and Assessment with Individuals (3)
SWK355	Practice with Organizations and Communities (3)

Social Work Minor

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.

6 courses

REQUIRED COURSES

SWK102	Introduction to Social Work, Social Justice and Social Issues (3)
SWK201W	Human Behavior in Social Environment (3)
SWK321	Social Welfare Policy (3) **OR**
SWK322W	Social Welfare: Women and Policy (3)
SWK351	Interviewing and Assessment with Individuals (3)
SWK352	Interventions with Individuals and Families (3) **OR**
SWK354	Practice with Groups (3) **OR**
SWK355	Practice with Organizations and Communities (3)

CHOOSE ONE SWK 200- OR 30-LEVEL ELECTIVE

Spanish Minor

Students who declare a Spanish minor will study the language as well as the cultural contexts of the language.

Pre-requisite is introductory-level proficiency in Spanish. This is equivalent to the completion of the introductory Spanish course sequence (LNG 161 and LNG 162 plus LNG 161Lab and LNG 162Lab). Students proficient in the language may be exempted based on Chatham placement scores.

5 courses and 2 labs

ENG209	Linguistics (3)
LNG261	Intermediate Spanish I (3)
LNG261L	Intermediate Spanish I Lab (1)
LNG262	Intermediate Spanish II (3)
LNG262L	Intermediate Spanish II Lab (1)

TWO UPPER-LEVEL LANGUAGE OR CULTURE ELECTIVES
TAKEN AT CHATHAM, A PCHE SCHOOL, OR PARTNER INSTITUTION ABROAD

Chatham Electives

HIS200W	Revolutions in Latin America (3)
LNG361	Spanish Grammar, Composition and Conversation (3)
LNG313	Special Topics (3)

Theater Minor

18 credits

REQUIRED COURSES

THT141	Acting One (3)
THT147	Stage Craft (3)
THT231	Acting Two (3)
THT241	History of Drama (3)

CHOOSE SIX CREDITS FROM THE FOLLOWING

THT149	Play Performance I (3)
THT213	Special Topics (3)
THT245	Practicum in Technical Theatre I (3)
THT260	Theatre Production Lab (3)
THT458	Directing (4)
THT491	Independent Study (1)

Visual Arts Minors

Visual Arts: Art History Minor

6 courses

ART131	History of World Art I: Prehistory to 1400 (3)
ART132	History of World Art II: 1400 to Contemporary (3)
ART213	Special Topics (3) **OR**
ART313	Special Topic (3)
ART231	Renaissance (3) **OR**
ART234	Baroque and Rococo Art (3)
ART254	Modern Art, 1900 to Present (3) **OR**
ART328	The Carnegie International (3)
ART248	19th-Century Art (3) **OR**
ART366	American Art: Colonial to 1900 (3)

Visual Arts: Studio Arts Minor

6 courses

REQUIRED COURSES

ART117	Drawing I (3)
ART214	Design Studio (3)
ART220	Material Studies Studio (3)

CHOOSE ONE

ART217	Drawing Studio (3)
ART115	Painting Studio (3)
ART127	Printmaking Studio (3)
ART111	Ceramics I (3)
ART205	Sculpture I (3)

CHOOSE ONE

ART211	Ceramics Studio (3)
ART215	Painting Studio (3)
ART227	Printmaking Studio (3)
ART305	Sculpture Studio (3)
ART317	Drawing Studio (3)
ART320	Material Studies Studio (3)

CHOOSE ONE

ART315	Painting Studio (3)
ART327	Printmaking Studio (3)
ART311	Ceramics Studio (3)
ART405	Sculpture Studio (3)
ART417	Drawing Studio (3)
ART420	Material Studies Studio (3)

*Students should work with their academic advisor to develop their studio concentration and choose electives in either the 2D disciplines or 3D disciplines.

Women's and Gender Studies Minor

The minor in women's and gender studies offers students the opportunity for the interdisciplinary study of women's contributions to society and women's experience in diverse cultures, polities, and historical periods. Students seek to understand the new scholarship on women and the new intellectual frameworks, methodologies, and feminist theories that examine gender as a social construct. They analyze critically the representations and voices of women in literature, 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.

6 courses

REQUIRED COURSES

WGS101	Intro to Women's & Gender Studies (3)
WGS201W	Feminist Theory (3)
WGS322W	Social Welfare: Women and Policy (3)

CHOOSE THREE ELECTIVES

OFFERINGS VARY; BELOW IS A SELECTION

ART213	Social Justice & Art (3)
ART230W	Women and Art (3)
BIO218	Women's Health Issues (3)
CRM220	Women and the Criminal Justice System (3)
CST183	Representations of Race and Gender (3)
CST215	Perspectives in Queer Theory (3)
ENG220	Gender and Sexuality in Speculative Fiction (3)
ENG262	Introduction to Women Writers (3)
ENG385	Toni Morrison Seminar (3)
FDT225	Female Narration (3)
HIS220	US Women's History (3)
IND247	Intergroup Dialogue Seminar on Gender (3)

MUS105	History of Rock, Pop, and Soul (3)
PHI218	Ethics and Women's Issues (3)
PHI241	Love, Sex, and Friendship (3)
PHI300	Womanist and Liberation Theology (3)
POL262	Women and Politics (3)
PSY236	Psychology of Women (3)
SWK102	Intro to Social Issues, Women, and Social Work (3)
SWK321	Social Welfare Policy (3)
WGS202	Women's Leadership in the 21st Century (3)
WGS210	Narratives of Girlhood: Perils and Possibilities (3)
WGS365	Gendered Resistance, Riots, and Rebellions (3)

UNDERGRADUATE CERTIFICATE PROGRAMS

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.

6 courses + Internship or Field Placement

REQUIRED COURSES

SWK102	Introduction to Social Work, Social Justice and Social Issues (3)
SUS102	Sustainability and Society (3)
FST315	Food Access and Policy (3)
SUS203W	Planetary Health: Human Health & Natural Systems (3)
SWK355	Working with Organizations and Communities

CHOOSE ONE ELECTIVE

EDU340	Education for Sustainability (3)
FST215W	Global Foodways (3)
FST302	Nutrition and Community (3)
FST307W	Community and Food (3)
SUS210	Sustainability and Technology (3)
SUS335	Renewable Energy and Society (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainability Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)
SUS435	Green and Social Innovation (3)
SUS470	Corporate Social Responsibility (CSR) (3)
SWK201W	Human Behavior in the Social Environment I (3)
SWK321	Social Welfare Policy (3)
SWK322W	Social Welfare: Women and Policy (3)
WGS322W	Social Welfare: Women and Policy (3)

INTERNSHIP OR FIELD PLACEMENT THAT MEETS SOCIAL WORK AND SUSTAINABILITY GOALS

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.

6 courses

REQUIRED COURSES

CRM101	Introduction to Criminal Justice (3) **OR**
SWK102	Introduction to Social Work, Social Justice and Social Issues (3)
SWK224	Juvenile Justice (3) **OR**
CRM224	Juvenile Justice (3)
INTCRM303	Internship - Criminology (3)
SWK/CRM490	Integrative Capstone (3)

CHOOSE TWO CRM/PSY/SWK ELECTIVES

International Studies Certificate

Chatham's International Certificates allow students to add a significant international component to their degree programs, and a mark of distinction to their official Chatham transcripts. The certificate programs are open to undergraduates, graduate students, and post-baccalaureate students. Certificates are offered in five major global regions: Africa, Asia, Europe, Latin America, and the Middle East.

Students are required to complete language study to at least the intermediate level and to participate in a study abroad or internship abroad experience. Students may test out of some or all language requirement. They will not be given course credit, but the requirement will be waived. Certificates must be at least 18 credits. In cooperation with the Chair of the Department of Social Sciences, students placing out of language must be sure that appropriate course work meets the 18-credit requirement.

Courses taken while on study abroad may apply to the 18-credit elective requirement. The elective list for each concentration is not exhaustive and courses approved by the certificate advisors may count as electives as well.

International Studies Certificate: Asia Concentration

18 credits

REQUIRED COURSE

CST/HIS204W	East Asian Studies (3)

9 CREDITS IN CHINESE OR JAPANESE LANGUAGE OR EQUIVALENT PROFICIENCY LEVEL IN AN APPROVED ASIAN LANGUAGE

LNG120	East Asian Language Arts (1)
LNG1XX	Introduction _____ I (4)
LNG1XX	Introduction _____ II (4)

CHOOSE 200-LEVEL ELECTIVE AND ONE 200- OR 300-LEVEL ELECTIVE

CST235	East Asian Cinema (3)
CST/HIS342	Post/Modern China: Digital Storytelling (3)
CST/HIS351	Asian Pacific Islander America: Culture and History (3)
ENG205	East-West Travel Tales (3)

STUDY ABROAD OR INTERNSHIP

International Studies Certificate: Africa Concentration

18 credits

REQUIRED COURSE

HIS205W Africa: Past and Present (3)

APPROVED LANGUAGE THROUGH INTERMEDIATE LEVEL*

LNG2XX Intermediate _____ I (4)
LNG2XX Intermediate _____ II (4)

* Approved languages: Arabic, French, Portuguese or an African language sanctioned by the Certificate Advisor

CHOOSE 200-LEVEL ELECTIVE AND ONE 200- OR 300-LEVEL ELECTIVE

ART372 Curating African Art (3)
HIS216 Rise of the Third World (3)
HIS328 Recent African History and NGO Networks (3)

STUDY ABROAD OR INTERNSHIP

International Studies Certificate: Europe Concentration

18 credits

REQUIRED COURSE

HIS202W Modern Europe (3)

APPROVED LANGUAGE THROUGH INTERMEDIATE LEVEL

LNG2XX Intermediate _____ I (4)
LNG2XX Intermediate _____ II (4)

CHOOSE 200-LEVEL ELECTIVE AND ONE 200- OR 300-LEVEL ELECTIVE

ART231 Renaissance
ENG207 British Writers I
ENG208 British Writers II
ENG321 Shakespeare
HIS215 Industrialization and the Working Class in Europe and America
HIS224 The Holocaust: Nazis, Occupied Europe and the Jews
MUS267 History of Music I
MUS268 History of Music II
POL222 Government and Politics of Eastern Europe
POL319 Politics of the European Union
POL320 Government and Politics of the Former Soviet Union

STUDY ABROAD OR INTERNSHIP (6-12 CREDITS)

International Studies Certificate: Latin America Concentration

18 or more credits

REQUIRED COURSE

HIS200W Revolutions in Latin America (3)

APPROVED LANGUAGE THROUGH INTERMEDIATE LEVEL

LNG2XX Intermediate _____ I (4)
LNG2XX Intermediate _____ II (4)

CHOOSE 200-LEVEL ELECTIVE AND ONE 200- OR 300-LEVEL ELECTIVE
See certificate advisor for electives

STUDY ABROAD OR INTERNSHIP (6-12 CREDITS)

International Studies Certificate: Middle East Concentration

18 or more credits

REQUIRED COURSE

HIS201	Modern Middle East (3)

APPROVED LANGUAGE THROUGH INTERMEDIATE LEVEL

LNG2XX	Intermediate _____ I (4)
LNG2XX	Intermediate _____ II (4)

CHOOSE 200-LEVEL ELECTIVE AND ONE 300-LEVEL ELECTIVE

HIS241	History of Islam (3)
HIS301	The Middle East and the United States (3)
HIS326	Arab-Israeli Conflict (3)

STUDY ABROAD OR INTERNSHIP (6-12 CREDITS)

Modern Languages

A certificate is awarded for completing a course in linguistics and a sequence of four language levels in Spanish, French, German, Japanese, Chinese, or Arabic. Students will be prepared to use their language skills in their chosen fields from business, science, and the arts to politics, healthcare, education, and more.

Students may take courses in multiple languages; however, they must take two intro- and two intermediate-level courses with labs. For example, a student with prior experience in Spanish may enter at the intermediate level, but to earn the certificate, they will need to take two introduction-level courses in another language like French or Japanese.

19 credits

REQUIRED COURSE

ENG20	Linguistics (3)

CHOOSE ONE LEVEL 1 COURSE WITH LAB

LNG101	Introduction to Arabic Language and Culture II (3) **AND**
LNG101L	Introduction to Arabic Language and Culture II Lab (1)
LNG121	Introduction to Chinese Language and Culture II (3) **AND**
LNG121L	Introduction to Chinese Language and Culture II Lab (1)
LNG131	Introduction to French Language and Culture II (3) **AND**
LNG131L	Introduction to French Language and Culture II Lab (1)
LNG141	Introduction to German Language and Culture II (3) **AND**
LNG141L	Introduction to German Language and Culture II Lab (1)
LNG151	Introduction to Japanese Language and Culture II (3) **AND**
LNG151L	Introduction to Japanese Language and Culture II Lab (1)
LNG161	Introduction to Spanish Language and Culture II (3) **AND**
LNG161L	Introduction to Spanish Language and Culture II Lab (1)

CHOOSE ONE LEVEL 2 COURSE WITH LAB

LNG102 Introduction to Arabic Language and Culture II (3) **AND**
LNG102L Introduction to Arabic Language and Culture II Lab (1)
LNG122 Introduction to Chinese Language and Culture II (3) **AND**
LNG122L Introduction to Chinese Language and Culture II Lab (1)
LNG132 Introduction to French Language and Culture II (3) **AND**
LNG132L Introduction to French Language and Culture II Lab (1)
LNG142 Introduction to German Language and Culture II (3) **AND**
LNG142L Introduction to German Language and Culture II Lab (1)
LNG152 Introduction to Japanese Language and Culture II (3) **AND**
LNG152L Introduction to Japanese Language and Culture II Lab (1)
LNG162 Introduction to Spanish Language and Culture II (3) **AND**
LNG162L Introduction to Spanish Language and Culture II Lab (1)

CHOOSE ONE LEVEL 3 COURSE WITH LAB

LNG201 Intermediate Arabic Language and Culture I* (3) **AND**
LNG201L Intermediate Arabic Language and Culture I Lab* (1)
LNG221 Intermediate Chinese Language and Culture I* (3) **AND**
LNG221L Intermediate Chinese Language and Culture I Lab* (1)
LNG231 Intermediate French Language and Culture I (3) **AND**
LNG231L Intermediate French Language and Culture I Lab (1)
LNG241 Intermediate German Language and Culture I (3) **AND**
LNG241L Intermediate German Language and Culture I Lab (1)
LNG251 Intermediate Japanese Language and Culture I (3) **AND**
LNG251L Intermediate Japanese Language and Culture I Lab (1)
LNG261 Intermediate Spanish Language and Culture I (3) **AND**
LNG261L Intermediate Spanish Language and Culture I Lab (1)

CHOOSE ONE LEVEL 4 COURSE WITH LAB

LNG202 Intermediate Arabic Language and Culture II* (3) **AND**
LNG202L Intermediate Arabic Language and Culture II Lab* (1)
LNG222 Intermediate Chinese Language and Culture II* (3) **AND**
LNG222L Intermediate Chinese Language and Culture II Lab* (1)
LNG232 Intermediate French Language and Culture II (3) **AND**
LNG232L Intermediate French Language and Culture II Lab (1)
LNG242 Intermediate German Language and Culture II (3) **AND**
LNG242L Intermediate German Language and Culture II Lab (1)
LNG252 Intermediate Japanese Language and Culture II (3) **AND**
LNG252L Intermediate Japanese Language and Culture II Lab (1)
LNG262 Intermediate Spanish Language and Culture II (3) **AND**
LNG262L Intermediate Spanish Language and Culture II Lab (1)

*Students should check with their advisor about Intermediate Chinese and Arabic availability.

Social, Emotional, and Behavior Wellness in Education Certificate

The Social, Emotional and Behavior Wellness in Education certificate focuses on the social-emotional, behavior and wellness of PK-12 students. The program aims to provide individuals working with youth with the tools and knowledge to create a nurturing, empathetic, supportive, and inclusive environment for students to support their overall development.

12 credits

REQUIRED COURSE

EDU360	Trauma Informed Approaches in Educational Settings (3)
EDU380	Advocacy, Collaboration, and Teamwork for SEL (3)
EDU420	MTSS to Promote Social Emotional Learning (3)
EDU480	Social-Emoational Learning Practicum (3)

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.

18 credits

REQUIRED COURSES

WGS101	Introduction to Women's and Gender Studies (3) **OR**
CST183	Representations of Race and Gender (3)
WGS202	Women's Leadership in the 21st Century (3)
INTWGS303	Internship - Women's and Gender Studies (3) **OR**
	Approved Internship course
WGS490	Integrative Capstone (3) **OR**
	Approved Capstone course

*Student may use Internship and/or Capstone from their major if learning outcomes also fulfill those for Certificate.

CHOOSE TWO ELECTIVES

ART213	Special Topics (3)
ART230W	Women and Art (3)
BIO218	Women's Health Issues (3)
CRM220	Women and the Criminal Justice System (3)

CST183	Representations of Race and Gender (3)
CST215	Perspectives in Queer Theory (3)
ENG220	Gender and Sexuality in Speculative Fiction (3)
ENG262	Introduction to Women Writers (3)
ENG385	Toni Morrison Seminar (3)
FDT225	Female Narration: Race and Gender in Women's Films (3)
HIS213	Special Topics (3)
IND247	Intergroup Dialogue Seminar (3)
MUS150	History of Rock, Pop and Soul (3)
PHI218	Ethics and Women's Issues (3)
PHI241	Love, Sex, and Friendship (3)
PHI300	Womanist and Liberation Theology (3)
POL262	Women and Politics (3)
PSY236	Psychology of Gender and Sexuality (3)
SWK102	Introduction to Social Work, Social Justice and Social Issues (3)
WGS202	Women's Leadership in the 21st Century (3)
WGS210	Narratives of Girlhood: Perils and Possibilities (3)
WGS365	Gendered Resistance, Riots, and Rebellions (3)

Teaching Certifications

Certifications are regulated by government and professional agencies.

K-12 Visual Arts Certification

Student should enroll in the Visual Arts Major

X credits

REQUIRED COURSES IN EDUCATION

EDU104	Perspectives on Education (3)
EDU105	Child Development: Birth Through Grade 4 (3)
EDU205	ELL Teaching Strategies for Classroom Teachers (3)
EDU234	Inclusion: Issues and Strategies (3)
EDU240	Integrating the Arts (3)
EDU241	Pedagogical Practices (3)
EDU400	Data Driven Instruction Decisions (2)
EDU409	Differentiated Reading and Writing (3)
EDU411	Elementary Curriculum (3) **OR**
EDU415	Secondary Curriculum (3)
EDU431	Assessment and Adaptation (3)
EDU437	Methods of Teaching Elementary Art (3)
EDU447	Methods of Teaching Secondary Art (3)
EDU430	Diverse Family and Community Partnerships (3)
INTEDU423	Student Teaching (9)

Music Education Certification

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 in Music and a 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.

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.

Secondary Education Certification

44 credits

EDU104	Perspectives on Education (3)
EDU205	ELL Teaching Strategies for Classroom Teachers (3)
EDU234	Inclusion: Issues and Strategies (3)
EDU241	Pedagogical Practices (3)
EDU400	Data Driven Instruction Decisions (2)
EDU409	Differentiated Reading and Writing (3)
EDU415	Secondary School Curriculum (3)
EDU430	Diverse Family and Community Partnerships (3)
EDU431	Assessment and Adaptation (3)
EDU104	Perspectives on Education (3)
EDU205	ELL Teaching Strategies for Classroom Teachers (3)
EDU241	Pedagogical Practices (3)
EDU234	Inclusion: Issues and Strategies (3)
EDU241	Pedagogical Practices (3)
EDU400	Data Driven Instruction Decisions (2)
EDU409	Differentiated Reading and Writing (3)
EDU415	Secondary School Curriculum (3)
EDU430	Diverse Family and Community Partnerships (3)
EDU431	Assessment and Adaptation (3)

Special Education Certification

The Special Education Certificate provides candidates with skills to meet the needs of students with disabilities in PreK-12 settings. This program may require a fifth year to complete for those seeking dual PA Certification.

33 credits

REQUIRED COURSES

EDU227	Literacy (3)
EDU230	Mathematical Foundations (3)
EDU328	Literacy II: Connections to Literature (3)
EDU335	Methods of Teaching Elementary Mathematics (3)
EDS210	Collaboratin Consultation and Teamwork (3)

EDS320	Early Intervention Birth Through K (3)
EDS361	Instructing Students with High Incidence Disabilities (3)
EDS362	Instructing Students with Low Incidence Disabilities (3)
EDS405	Instructin Students with Autism (3)
EDS464	Behavior and Social Intervention and Support (3)
EDS490	Practicum in Special Education (3)

GRADUATE DEGREE PROGRAMS

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. Coursework will enhance highly sought professional skills. 32 credits, nine required courses and two elective courses.

REQUIRED COURSES

BIO512	Advanced Human Gross Anatomy (3)
BIO512L	Advanced Human Gross Anatomy Lab (2)
BIO514	Advanced Human Physiology (3)
BIO515	Portfolio Development for Professional Schools (1)
BIO516	Advanced Neuroscience (3)
BIO516L	Advanced Neuroscience Lab (2)
BIO517	Genetics (3) **OR**
BIO519	Immunology (3) **OR**
BIO558	Histology (3) **OR**
BIO561	Pharmacology (3)
BIO538	Biochemistry I (3) **OR**
BIO539	Biochemistry II (3)
BIO630	Biological Research Principles (3)

CHOOSE THREE ELECTIVES

BIO508	Developmental Biology (3)
BIO517	Genetics (3)
BIO519	Immunology (3)
BIO532	Biostatistics (3)
BIO555	Medical and Bio-ethics (3)
BIO558	Histology (3)
BIO561	Pharmacology (3)
BIO562	Cardiometabolic Disease (3)
BIO693	Independent Study (3)
FST512	Practical Nutrition (3)
PSY503	Applied Biological Psychology (3)
PSY530	Introduction to Sport and Exercise Psychology (3)
PSY629	Human Development Across the Life Span (3)
PSY635	Concepts of Mental Health and Illness (3)
PSY663	Foundations of Health Psychology (3)

Creative Writing (MFACW and MACW)

The **Master of Fine Arts in Creative Writing** is a broad program of study 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.

The **Master of Arts in Creative Writing** 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.

MA 30 credits/MFA 36 credits

ONE CRAFT COURSE IN YOUR PRIMARY GENRE

ENG523 The Craft of Creative Writing: Multiple Genres (3)
ENG581 The Craft of Fiction (3)
ENG582 The Art and Craft of Narrative (3)
ENG583 The Art and Craft of the Lyric (3)

ONE READINGS COURSE IN PRIMARY GENRE OR MULTI-GENRE

ENG531 Readings in Contemporary Lyricism (3)
ENG532 Readings in Prose and Poetry (3)
ENG533 Readings in Contemporary Narrative (3)

TWO ADVANCED WRITING WORKSHOPS IN YOUR PRIMARY GENRE

ENG535 Writing Poetry: Form (3)
ENG539 Writing Creative Nonfiction: Memoir (3)
ENG537 Writing Poetry: Literary Movements (3)
ENG544 Writing Creative Nonfiction: The Lyric & Formally Adventurous Essay (3)
ENG545 Writing Creative Nonfiction: Literary Journalism (3)
ENG548 Writing Creative Nonfiction (3)
ENG551 Writing Fiction: The Short Story (3)
ENG553 Writing Poetry (3)
ENG554 Writing Fiction (3)
ENG557 Writing Fiction: Story Collections/Novel-in-Stories (3)
ENG589 Creative Writing: Multi-Genre (3)

ONE NATURE OR TRAVEL WRITING COURSE

ENG584 The Environmental Imagination (3)
ENG585 Travel Writing (3)

FOUR CONTENT COURSES, AT LEAST TWO MUST BE LITERATURE-BASED

ONE ELECTIVE MFACW COURSE THAT DOES NOT REQUIRE PRE-REQUISITES

MFACW: ONE THESIS SEMINAR CORRESPONDING TO PRIMARY GENRE

ENG605	Prose Thesis Seminar (3)
ENG606	Thesis Seminar (3)
ENG607	Thesis Seminar: Poetry

MFACW: ENG698 FINAL MANUSCRIPT

Creative Writing, Low-Residency (MFACW)

Effective August 1, 2023, the Master of Fine Arts in Creative Writing-Low Residency program is not accepting applications while the program is on hiatus. All currently enrolled students will progress through the program to completion. Students interested in this program should explore our traditional MFA in Creative Writing program.

Chatham University's Low-Residency Master of Fine Arts Creative Writing (MFACW) program 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 MFACW 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.

36 credits

ENG600	Foundations of Creative Writing (3)
ENG601	Foundations in Literary Analysis (3)
ENG621	Advanced Literary Analysis I (3)
ENG622	Advanced Creative Writing I (3)
ENG623	Advanced Literary Analysis II (3)
ENG624	Advanced Creative Writing II (3)
ENG660	Thesis Writing Mentorship (3)
ENG698	Final Manuscript (3)

CHOOSE ONE CONTENT COURSE

This may be literature, publishing, or internships. Non-creative writing. Course offerings may include:

ENG569	The Fourth River Practicum (3)
ENG584	The Environmental Imagination (3)
ENG585	Travel Writing (3)

CHOOSE THREE ELECTIVES

This may be any course in literature, creative writing, publishing, or internships. Course offerings may include:

ENG569	The Fourth River Practicum (3)
ENG584	The Environmental Imagination (3)
ENG585	Travel Writing (3)
ENG709	Summer Community of Writers

Interior Architecture

Master of Interior Architecture (MIA)

54 credits

REQUIRED COURSES

IAR502	Theory of Interior Architecture (3)
IAR505	Design and Behavior (3)
IAR510	2D Visual Communications (3)
IAR515	Digital Visualization II (3)
IAR517	Interior Architecture I (3)
IAR518	Building Codes (3)
IAR520	Interior Architecture II (3)
IAR525	Interior Architecture III (3)
IAR526	Interior Architecture IV (3)
IAR561	History of Architecture (3)
IAR562	20th and 21st Century Architecture
IAR610	Digital Visualization III (Revit) (3)
IAR615	Construction Documents (3)
IAR621	Interior Architecture V (3)
IAR630	Construction Systems & Methods (3)
IAR645	Profesional Practice (3)
IAR655	Immersive Design Research (3)
IAR660	Interior Architecture VI Capstone (3)

College of Health Sciences

UNDERGRADUATE MAJORS

- Exercise Science
- Health and Wellness
- Pathways to Nursing
- RN-to-BSN

UNDERGRADUATE MINORS

- Exercise Science
- Nutrition

GRADUATE PROGRAMS

- Athletic Training, Master of Science (MSAT)
- Counseling Psycology, Master of Science (MSCP)
- Counseling Psychology, Doctor of Psychology (PsyD)
- Nursing, Master of Science (MSN)
- Nursing (RN-MSN)
- Nursing, Doctor of (DNP)
- Nursing (BSN-to-DNP)
- Occupational Therapy, Entry-Level Doctor of (ELOTD) **AND** Occupational Therapy, OTA to Entry-Level Doctor of
- Occupational Therapy, Post-Professional Doctor of (PPOTD) **AND** Occupational Therapy, Bridge to Post-Professional Doctor of
- Physical Therapy, Doctor of (DPT)
- Physician Assistant Studies, Master of (MPAS)
- Psychology, Master of Arts (MAP)

GRADUATE CERTIFICATES

- Nurse Educator Certificate

UNDERGRADUATE MAJORS

Exercise Science

The exercise science major is accredited by the Commission on Accreditation of Allied Health Education Programs (www.CAAHEP.org). The program prepares students for professional practice in a variety of fields including exercise and fitness training, hospital-based and corporate wellness programming, and 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 studying how or gan 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.

Accreditation

Chatham University is accredited by The Commission on Accreditation of Allied Health Education Programs (CAAHEP)–Committee on Accreditation for the Exercise Sciences.

Chatham University is a National Strength and Conditioning Association (NSCA) Education Recognition Program (ERP).

BS in Exercise Science

57 credits

REQUIRED COURSES, CHOOSE 8 CREDITS

BIO143	The Cell (3)
BIO143L	The Cell Lab (1)
BIO144	The Organism (3)
BIO144L	The Organism Lab (1)
CHM107	Chemistry I (3)
CHM108	Chemistry II (3)
CHM109L	Chemistry I Lab
CHM110L	Chemistry II Lab (1)
PHY151	Fundamentals of Physics I (3)
PHY152	Fundamentals of Physics II (3)
PHY155L	Fundamentals of Physics I Lab (1)
PHY156L	Fundamentals of Physics II Lab (1)

REQUIRED COURSES

BIO116	Anatomy & Physiology I (4)
BIO117	Anatomy & Physiology II (4)
EXS101	Introduction to Exercise Science (1)

EXS102	First Aid & CPR (1)
EXS201W	Critical Appraisal of the Literature (2)
EXS 233	Functional Anatomy (3)
EXS252W	Exercise and Nutrition (3)
EXS275	Measurement/Evaluation in Human Perf (3)
EXS302	Principles of Strength & Conditioning (3)
EXS 302L	Principles of Strength and Conditioning Lab (1)
EXS326	Applied Exercise Physiology I (3)
EXS326L	Applied Exercise Physiology I Lab (1)
EXS345	Kinesiology & Movement Science (3)
EXS345LW	Kinesiology & Movement Science Lab (1)
EXS410	Professional Experience in Exercise Science (1)
EXS426	Applied Exercise Physiology II (3)
EXS426L	Applied Exercise Physiology II Lab (1)
EXS450	Exercise Prescription for Special Populations (2)
EXS490	Capstone (3)
INTEXS303	Internship (3)

CHOOSE ONE ELECTIVE

EXS303	Skeletal Muscle Biochemistry (3)
EXS321	Prevention & Care of Injuries (3)
EXS360	Exercise Aging & Disease (3)
EXS385	Pathophysiology (3)
EXS425	Certification Preparation (3)
EXS430	Group Exercise Leadership (3)

Health and Wellness

The BS in Health and Wellness curriculum provides interdisciplinary studies that are ideal for careers in health care. Students shall acquire the skills to think critically and scientifically about human health and behaviors, understand and navigate healthcare systems, and value/gain perspectives on health and disability, and their social and environmental determinants. Competencies acquired in this major are applicable to careers in patient care, healthcare service administration, health promotion, and public health. Students are well-positioned to pursue graduate studies that are either focused on health professions (medicine, physical therapy, occupational therapy), healthcare policy/administration, and/or health-related research.

BS in Health and Wellness

43 credits

REQUIRED COURSES

EXC123	Basics of Nutrition (3)
EXS314	Community Nutrition (3) **OR**
EXS252	Exercise & Nutrition (3)
HSC100	Introduction to the Health Professions (1)
HSC110	Foundations of Health & Wellness (3)
HSC220	Health Coaching (3)
HSC240	Fundamentals of Global & Public Health (3)

HSC310	Health Determinants, Inequities, and Disparities (3)
HSC320	Disability and Society **OR**
HSC330	Ageing and Health (3)
HSC340	Principles of Interprofessional Healthcare (3)
HSC350W	Research and Methods for Health Professions (3)
HSC410W	Evidence-based Practice in Healthcare (3)
HSC420	Patient Safety and Quality (3)
HSC430	Community Health **OR**
HSC360	Sustainability and Human Health (3)
HSC450	Health Education and Health Promotion (3)
HSC490	Integrative Capstone Seminar (3)

Pathways to Nursing

Pathways to Nursing (PTN) prepares world-ready nurses with the knowledge and skills necessary in today's healthcare system. Through a partnership with UPMC Shadyside School of Nursing, students will complete general studies courses at Chatham and simultaneously complete the nursing diploma program. PTN students will progress to the RN-BSN portion of the program once they have earned their RN license by successfully passing the NCLEX-RN exam. Students who do not pass the NCLEX-RN exam by the start of fall classes their senior year will be unable to complete PTN in the designated four-year timeframe. Students can begin the RN-BSN Program after successfully passing the NCLEX-RN exam and submitting proof of an unencumbered RN license.

RN-BSN curriculum, courses, and progression are subject to change. PTN students will follow the curriculum in place during their senior year.

Bachelor of Science in Nursing

82 credits

REQUIRED COURSES

BIO116	Anatomy and Physiology–I (3)
BIO116L	Anatomy and Physiology–I Lab (1)
BIO117	Anatomy and Physiology–II (3)
BIO117L	Anatomy and Physiology–II Lab (1)
N110	Professional and Foundational Concepts of Nursing (12)
N201	Physiological Concepts of Nursing (10)
N301	Complex Individual and Family Nursing Concepts (11)
N320	Advanced Nursing Concepts (7.5)
N340	Transition Into Nursing Practice (5.5)
N360	NCLEX Preparation Course (2)
IND175	**Academic Resources and Strategies for Nurses (2)**
NUR402	**Health Policy and Finance for Nurses (3)**
NUR407	Scholarship Foundations in Nursing (3)
NUR409W	**Community Health and Prevention (3)**
NUR410	**Global, Cultural, and Diverse Populations (3)**
NUR412	**Organizational Quality Improvement and Safety (3)**
NUR414	Nursing Informatics, Technology and Communication (3)

NUR415 **Contemporary Nursing Issues (3)**
NUR499W **Nursing Leadership and Professional Identity Development (3)**

***Bold courses** count as General Education credits

RN-to-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 Essentials (2021), to provide holistic, evidence-based nursing care, in health and 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 nurse role.

The RN-BSN program is an accelerated online distance learning program that requires completion of a minimum of 120 credit hours in college level courses, including the General Education requirements, either through transfer credits or completion of additional coursework. 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.

NOTE on BSN general education: 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.

Accreditation

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.

Bachelor of Science in Nursing

26 credits

REQUIRED COURSES

IND175 **Academic Resources and Strategies for Nurses (2)**
NUR402 **Health Policy and Finance for Nurses (3)**
NUR407 Scholarship Foundations in Nursing (3)
NUR409W **Community Health and Prevention (3)**
NUR410 **Global, Cultural, and Diverse Populations (3)**
NUR412 **Organizational Quality Improvement and Safety (3)**
NUR414 Nursing Informatics, Technology, and Communication (3)

NUR415 Contemporary Issues in Nursing (3)
NUR499W Nursing Leadership and Professional Identity Development (3)

***Bold courses** count as General Education credits

PRACTICE EXPERIENCE REQUIREMENTS

Chatham's accreditors, 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 and course activities, which require students to integrate, apply, and demonstrate new knowledge when providing care to various patients across the lifespan and continuum of care. Students are not required 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.

UNDERGRADUATE MINORS

Exercise Science Minor

The exercise science minor is an undergraduate focus that provides students with additional training and education in the physiology and science of exercise and physical activity. The goal of exercise science is to understand the relationship between fitness, exercise, diet, and health.

24 credits

REQUIRED COURSES

BIO116	Anatomy & Physiology I with Lab (4) **OR**
BIO201/L	Anatomy & Lab (3+2)
BIO117	Anatomy & Physiology II with Lab (4) **OR**
BIO302/L	Physiology & Lab (3+2)
EXS252W	Exercise & Nutrition (3)
EXS302	Strength & Conditioning (3)
EXS326	Applied Exercise Physiology I (3)
EXS326L	Applied Exercise Physiology I Lab (1)

CHOOSE ONE ELECTIVE

EXS303	Skeletal Muscle Biochemistry (3)
EXS321	Prevention & Care of Injuries (3)
EXS345	Kinesiology & Movement Science (3) **AND**
EXS345LW	Kinesiology & Movement Science Lab (1)
EXS360	Exercise Aging & Disease (3)
EXS385	Pathophysiology (3)

Nutrition

The nutrition minor provides students with a foundation in nutrition, which is the study of how food works in the body and how it affects health. Nutrition minors can help students develop knowledge and skills that can improve their health and marketability in many professional fields. This minor can help students prepare for graduate training or research in nutrition and dietetics.

20 credits

REQUIRED COURSES

CHM105	Chemistry 1 (3) **OR**
CHM107	Chemistry I (3)
CHM109L	Chemistry I Lab (1)
EXS105	Personal Nutrition (1)
EXS252W	Exercise and Nutrition (3)
EXS313	Nutrition Across the Lifespan (3)
EXS413	Nutrition Planning (3)

CHOOSE TWO ELECTIVES

EXS314	Community Nutrition (3)
EXS412	Sports Nutrition (3)
FST205	Food Science Principles and Practice (3)

GRADUATE DEGREE PROGRAMS

Athletic Training (MSAT)

The curriculum for the Master of Science 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.

Accreditation

Chatham University is accredited by the Commission on Accreditation of Athletic Training Education (CAATE)

Master of Science in Athletic Training

67 credits

ATH500	Prevention and Care of Emergency Medical Conditions (3)
ATH501	Therapeutic Modalities (4)
ATH502	Introduction to Professional Practice (2)
ATH503	Orthopedic and Neurologic Assessment I (4)
ATH504	Orthopedic and Neurologic Assessment II
ATH505	Medical Management of an Athletic Population (3)
ATH506	Therapeutic Interventions I (4)
ATH507	Therapeutic Interventions II (4)
ATH508	Pharmacology in Athletic Training (2)
ATH509	Research Seminar I (1)
ATH510	Research Seminar II (1)
ATH511	Research Seminar III (1)
ATH512	Clinical Experience in Athletic Training I (3)
ATH513	Clinical Experience in Athletic Training II (3)
ATH514	Clinical Experience in Athletic Training III (2)
ATH515	Clinical Experience in Athletic Training IV (4)
ATH516	Clinical Experience in Athletic Training V (3)
ATH517	Administration and Management (3)
ATH518	Optimizing Athletic Performance (3)
ATH519	Advanced Topics in Athletic Training (3)
ATH520	Certification Preparation Course (1)
ATH521	Advanced Sports Nutrition (3)
ATH522	Healthcare Delivery (3)
PSY530	Introduction to Sport and Exercise Psychology (3)

Counseling Psychology (MSCP)

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.

A total of 60 credit hours is needed to become a licensed professional counselor in PA.

Master of Science in Counseling Psychology

60 credits

REQUIRED COURSES

PSY501	Foundations of Counseling Psychology (3)
PSY555	Statistics and Research Methods (3)
PSY605	Biopsychology (3)
PSY617	Psychology of Culture and Identity (3)
PSY627	Vocational Career Counseling (3)
PSY629	Human Development across the Life Span (3)
PSY642	Assessment (3)
PSY657	Psychopathology & Resilience (3)
PSY658	Evidence-Based Practice (3)
PSY662	Theories and Techniques of Counseling (3)
PSY672	Group Counseling (3)
PSY674	Foundations of Family Therapy (3)
PSY681	Professional Integration Seminar (3)

REQUIRED FIELD PLACEMENTS

PSY682	Practicum (3)
PSY685	Supervised Internship I (3)
PSY686	Supervised Internship II (3)

CHOOSE FOUR ELECTIVES

PSY511	PAAR Training in Sexual Assount Counseling
PSY515	Human Sexuality (3)
PSY530	Introduction to Sport and Exercise Psychology (3)
PSY602	Sport and Exercise Psychology Interventions (3)
PSY621	Advanced Seminar in Diversity Issues (3)
PSY632	Positive Psychology (3)
PSY645	Environmental Psychology (3)

PSY646 Intergroup Dialogue Facilitation Training (3)
PSY647 Intergroup Dialogues
PSY663 Foundations of Health Psychology (3)
PSY665 Addictions Counseling (3)
PSY668 Crisis, Trauma and Recovery (3)
PSY669 Foundations of Expressive Arts Therapy (3)
PSY671 Mindfulness Counseling (3)
PSY673 Couples Counseling (3)
PSY676 Counseling Children and Adolescents (3)
PSY677 Grief Counseling (3)
PSY678 Risk and Resilience in Childhood (3)
PSY693 Independent Study (3)
PSY687 Advanced Internship I (3)
PSY718 Psychology and Sustainability (3)
PSY730 Psychology of Emerging Adulthood (3)
Or graduate level course approved by program director.

Counseling Psychology (PsyD)

The Doctor of Psychology in Counseling Psychology (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 vary accordingly. This will depend upon whether the student enters the program with a master's degree from an institution other than Chatham, a Master of Arts in Psychology (MAP) or Master of Science in Counseling Psychology (MSCP) from Chatham or a bachelor's degree.

Post-master's students from an institution other than Chatham who have accrued a master's degree in counseling, counseling psychology, clinical psychology, psychology or related field should have foundational, equivalent, 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-master's students with the foundational coursework take 85 credits in the PsyD program. Post-master's 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. Foundational coursework taken during their doctoral studies at Chatham University count towards the minimum of 85 total credits that are required for the PsyD degree. 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-master's students with a degree from an institution other than Chatham, the PsyD degree credit requirement ranges from 85-103 credits.

Students wishing to enter the PsyD program after accruing a Master of Arts in Psychology (MAP) or Master of Science in Counseling Psychology (MSCP) from Chatham will need to complete an Integrated Degree Program (IDP) form prior to the time of admission to the PsyD program (prior to degree conferral of MAP or MSCP). This will allow 15 credits in relevant counseling psychology topics that are shared between the MAP/MSCP and PsyD degree to be credited towards the 85 post-master's doctoral credits required for degree completion.

Students entering the PsyD program after accruing their bachelor's degree in psychology or related field first earn a Master of Arts in Psychology (MAP) and then transition into the PsyD program curriculum. The MAP covers 18 credits for the foundational coursework (Helping Skills, Statistics/Research Methods, Multiculturalism & Diversity, Psychopathology, Evidence-Based Practice, Group Counseling, and 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-bachelor's 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.

Doctor of Psychology in Counseling Psychology

AREA A: FOUNDATIONAL COURSES

36 credits

Foundational courses cover psychological knowledge at the graduate-level required by the American Psychological Association. Students need to complete this coursework prior to advancing to higher-level doctoral coursework. Often, foundational courses are taken at the masters-level and can be counted as complete. Students entering the PsyD program without foundational coursework will need to complete those course(s). This coursework adds up to 36 credits, which is required to earn the MAP en route to the PsyD for bachelor's level admits to the doctoral program. PSY605 Biopsychology is also an appropriate course to take at the masters-level to fulfill the requirement for the PsyD degree.

PSY501	Foundations of Counseling Psychology (3)
PSY555	Statistics & Research Design (3)
PSY617	Psychology of Culture & Identity (3)
PSY627	Vocational Counseling (3)
PSY629	Human Development Across the Lifespan (3)
PSY642	Assessment (3)
PSY657	Psychopathology & Resilience (3)

PSY658	Evidence-Based Practice (3)
PSY662	Theories & Techniques of Counseling (3)
PSY672	Group Counseling (3)
PSY674	Foundations of Family Therapy (3)
PSY681	Professional Integration Seminar (3)

AREA B: COUNSELING PSYCHOLOGY PROFESSIONAL

18 Credits

The Professional Core includes coursework specific to the practice of counseling psychology. The majority of the courses need to be taken prior to comprehensive exams and are assessed as part of comprehensive exams.

PSY711	Multicultural & Diversity Issues in Counseling Psychology (3)
PSY715	Ethical Issues in Counseling Psychology (3)
PSY780	Professional Seminar in Counseling Psychology (3)
PSY806	Supervision & Leadership (3)
PSY815	Organizations, Communities, and Consultation (3)
PSY816	Health Psychology Practice (3)

AREA C: DISCIPLINE SPECIFIC KNOWLEDGE (AKA CORE AREAS OF PSYCHOLOGY)

28 Credits

The Core Areas of Psychology includes coursework common to the field of psychology. The majority of the courses need to be taken prior to comprehensive exams and are assessed as part of comprehensive exams. If PSY605 was taken at the master's level, the course should be substituted with an approved elective under area G.

PSY605	Biopsychology (3)
PSY706	History of Psychology (3)
PSY707	Social Psychology (3)
PSY708	Cognitive & Affective Bases of Behavior (3)
PSY709	Intellectual Assessment (3)
PSY714	Personality Theory & Assessment (3)
PSY716	Psychometrics (2)
PSY810	Advanced Data Analysis (4)
PSY712	Advanced Research Design & Analysis (4)

AREA D: PRACTICUM

12 Credits

Students are required to complete 12 credits of practica prior to advancing to pre-doctoral internship. Students are expected to discuss their practica preferences and capacity of hours/credits on a regular basis with their advisor, Field Placement Supervisor, and practicum instructor. Students can take practica at various credit-levels based on hour expectations as well as competencies.

PSY746A	Practicum I (1)
PSY746	Practicum I
PSY750	Practicum II
PSY840	Practicum III
PSY841	Practicum IV
PSY842	Practicum V (optional)

AREA E: DISSERTATION

6 Credits

The dissertation is a capstone, independent research project. Students are required to complete six dissertation credits. Students typically enroll in their first dissertation credit during the semester that they propose their dissertation. An approved dissertation proposal is required prior to applying for pre-doctoral internship. Students are expected to discuss their dissertation plan, timeline progress with their academic advisor/dissertation chair on a regular basis.

PSY862 Dissertation I (3)
PSY863 Dissertation II (3)

AREA F: DOCTORAL INTERNSHIP

3 Credits

The doctoral internship is a capstone, clinical training experience. Students need to successfully pass both portions of the comprehensive examination (oral and written), have an approved dissertation proposal, and otherwise need to be in good academic standing with the University and program to apply for internship. In addition, students need to complete all required coursework and practica prior to leaving for internship. Students complete three internship credits, typically by enrolling in one credit of internship for three continuous semesters (e.g., fall, spring, summer). Students may enroll in additional internship credit(s) as needed for financial aid purposes. Students are expected to discuss their internship plans with their academic advisor and Director of Training on a regular basis.

PSY871 Doctoral Internship (3)

AREA G: ELECTIVES

In line with their individual plan of study and with consultation from their academic advisor, students can take some elective courses in the PsyD program. Elective coursework is not assessed on the comprehensive examination.

PSY511 PAAR Training in Sexual Assault Counseling (3)
PSY515 Human Sexuality (3)
PSY530 Introduction to Sport and Exercise Psychology (3)
PSY602 Sport and Exercise Psychology Interventions (3)
PSY621 Advanced Seminar in Diversity Issues (3)
PSY632 Positive Psychology (3)
PSY645 Environmental Psychology (3)
PSY646 Intergroup Dialogue Facilitation Training (3)
PSY647 Intergroup Dialogues (3)
PSY663 Foundations of Health Psychology (3)
PSY665 Addictions Counseling (3)
PSY668 Crisis, Trauma and Recovery (3)
PSY669 Foundations of Expressive Arts Therapy (3)
PSY671 Mindfulness Counseling (3)
PSY673 Couples Counseling (3)
PSY676 Counseling Children and Adolescents (3)
PSY677 Grief Counseling (3)
PSY678 Risk and Resilience in Childhood (3)
PSY687 Advanced Internship I (3)

PSY669	Foundations of Expressive Arts Therapy (3)
PSY693	Independent Study (3)
PSY718	Psychology and Sustainability (3)
PSY720	Neuropsychological Assessment (3)
PSY730	Psychology of Emerging Adulthood (3)

Nursing (MSN)

The Chatham University Master of Science in Nursing (MSN) program assists individuals in acquiring the knowledge and skills to lead in the current and emerging healthcare fields. Students receive core knowledge based on on the American Association of Colleges of Nursing (AACN) Essentials (2021) and specialized knowledge and skills in their concentration of leadership or education. Learning focuses on integrating evidence-based findings from nursing and other fields for continual improvement of nursing care. Students will gain an understanding of health policy and advocacy and analyze and synthesize innovative approaches to complex issues in health care delivery. Students construct techniques of effective communication and collaboration with all members of the health care team. As nursing leaders, they have an advanced understanding of physical assessment, pathology, pharmacology, and health promotion. Chatham University nursing students will function effectively in many healthcare arenas and be prepared for further education at the doctoral level.

The MSN program is an online distance program. The program builds on the Bachelor of Science in Nursing foundation by preparing nurses to advance their practice as nurse educators or leaders in a variety of settings. Practice experiences requiring both direct and indirect care are completed throughout the program, some at approved practice experience sites with the guidance of an approved preceptor. Cohort for each track are admitted each fall.

Accreditation

The MSN program at Chatham University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington DC 20001, 202-887-6791.

Master of Science in Nursing

30 Credits

CORE COURSES

NUR501	Scientific Underpinnings: Practice and Scholarship (3)
NUR503	Informatics Foundation and Health Care Technology (3)
NUR505	Health Assessment and Promotion Across the Lifespan (3)
NUR506	Communication and Collaboration for Leadership (3)
NUR507	Health Policy and Advocacy for Quality Care (3)
NUR673	Professional Role Practicum (6)

NURSING LEADERSHIP TRACK COURSES

NUR630	Business Management in Health Care (3)
NUR640	Human Resource Management in Health Care (3)
NUR650	Leadership for Quality and Safety in Health Care (3)

NURSING EDUCATION TRACK COURSES

NUR632	Curriculum Design and Evaluation in Nursing Education (3)
NUR642	Nurse Educator Role Development (3)
NUR652	Teaching Strategies and Technology for the Nurse Educator (3)

PRACTICE EXPERIENCE REQUIREMENTS

Chatham University's MSN Program includes planned learning activities in nursing practice that allow students to understand, perform, and refine professional competencies expected in an MSN program. While meeting the program outcomes, which are linked to the AACN Essentials (2021), student Practice Experiences (PE) involve a comprehensive exploration of the masters-prepared professional nurse's role, and a deliberate approach to planning, designing, implementing, evaluating, and disseminating a collaborative, professional role practicum project.

The Commission on Collegiate Nursing Education (CCNE) requires the MSN programs include appropriate Practice Experiences related to the roles/areas for which students are being prepared. Chatham University's MSN programs prepare nurses to function as nurse educators and/or leaders. Ultimately, all students must have the opportunity to integrate new knowledge as they prepare to be an MSN program graduate. The design, implementation, and evaluation of Practice Experiences are aligned to student and program outcomes, allow for the opportunity to demonstrate competence in nursing education or leadership and are approved and evaluated by faculty. A total of 500 PE hours will be completed for the MSN degree. These hours will consist of both direct and indirect care. A portion of these hours will be spent with an approved, MSN-prepared preceptor. 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.

Nursing (RN-MSN)

The RN-MSN Integrated Degree Educator track allows students to earn two (2) degrees (BSN and MSN) in 44 credits. All students are required to complete a minimum of 120 credit hours in college-level courses, the university requirements for the bachelor's degree and general education requirements, and the completion of the designated nursing courses to earn the BSN degree.

Cohorts are admitted in the fall only.

Please refer to the RN-BSN section of the catalog for RN-BSN information and the MSN section of the catalog for MSN information.

RN-Master of Science in Nursing

44 credits

REQUIRED COURSES

IND175	Academic Resources and Strategies for Nurses (2)
NUR409W	Community Health and Prevention (3)
NUR410	Global, Cultural, and Diverse Populations (3)
NUR415	Contemporary Issues in Nursing (3)

NUR499W	Nursing Leadership and Professional Identity Development (3)
NUR501	Scientific Underpinnings: Practice and Scholarship (3)
NUR503	Informatics Foundation and Health Care Technology (3)
NUR505	Health Assessment and Promotion Across the Lifespan (3)
NUR506	Communication and Collaboration for Leadership (3)
NUR507	Health Policy and Advocacy for Quality Care (3)
NUR632	Curriculum Design and Evaluation in Nursing Education (3)
NUR642	Nurse Educator Role Development (3)
NUR652	Teaching Strategies and Technology for the Nurse Educator (3)
NUR673	Professional Role Practicum (3)

Nursing (DNP)

The Doctor of Nursing Practice (DNP) is a clinical doctorate that prepares students to become experts in specialized advanced nursing practice focused on innovative and evidence-based practice and systems leadership. More specifically, students develop competency with ongoing scientific inquiry and the application of credible research findings to promote safe, quality, and person-centered healthcare. The DNP graduate is seen as a leader within the interprofessional team and the larger healthcare community through enhanced clinical skills, dissemination of scholarly work to other healthcare professionals, and initiation of healthcare policy, advanced use of technology, and through demonstration of professional behaviors that encompass strong ethical, holistic, and organizational values.

The DNP program is a low-residency, online program for advanced professional nurses in various practice roles and is focused on competencies for evidence-based practice and systems leadership. The program includes a mandatory on-campus residency and culminates in an evidence-based practice clinical immersion experience. Practice experiences are completed at approved practice experience sites. Cohorts are admitted each fall and spring.

Accreditation

The DNP program at Chatham University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001 202-887-6791.

Doctor of Nursing Practice

27 Credits

REQUIRED COURSES

NUR700	Structure and Application in Nursing Knowledge (3)
NUR702	Developing Evidence-Based Practice (3)
NUR703	Population Health, Ethics, and Health Policy (3)
NUR704	Translating Evidence to Advance Best Practice (3)
NUR705	Financial Management and Dissemination of Evidence-Based Practice (3)
NUR706	Advanced Nursing Leadership in Healthcare Systems (3)
NUR707	Technology and Informatics for Advanced Practice Nursing (3)
NUR799	Implementing and Evaluating Evidence-Based Practice (6)

PRACTICE EXPERIENCE REQUIREMENTS

DNP students are required to complete 500 practice experience hours during the DNP program. 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. A practice experience site will be idenitified and approved during the first semester of coursework. A signed affiliation agreement with the identified agency 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 and for any costs or fees associated with additional healther requirements for their agency's practice setting.

Nursing (BSN-DNP)

The BSN to DNP Integrated Degree Executive Track allows the student to complete two graduate degrees in 48 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 minimum of 500 practice experience hours will be completed.

Cohorts are admitted in the fall only.

BSN-Doctor of Nursing Practice

48 credits

NUR501	Scientific Underpinnings: Practice and Scholarship (3)
NUR505	Health Assessment and Promotion Across the Lifespan (3)
NUR703	Population Health, Ethics, and Health Policy (3)
NUR706	Advanced Nursing Leadership in Healthcare Systems (3)
NUR707	Technology and Informatics for Advanced Practice Nursing (3)
NUR630	Business Management in Health Care (3)
NUR640	Human Resource Management in Health Care (3)
NUR650	Leadership for Quality and Safety in Health Care (3)
NUR673	Professional Role Practicum (6)
NUR700	Structure and Application in Nursing Knowledge (3)
NUR702	Developing Evidence-Based Practice (3)
NUR704	Translating Evidence to Advance Best Practice (3)
NUR705	Financial Management and Dissemination of Evidence-Based Practice (3)
NUR799	Implementing and Evaluating Evidence-Based Practice (6)

Occupational Therapy, Entry-Level (ELOTD)

Entry-level Doctorate of Occupational Therapy degree is a clinical doctorate that prepares students with the skills and knowledge required to pass the NBCOT (National Board Certification in Occupational Therapy) exam and to function as entry-level occupational therapy practitioners.

The vision of the Entry Level Doctor of Occupational Therapy Program at Chatham University is to be nationally recognized as a leader in OT education. Our faculty and graduates will be recognized as innovative, compassionate occupational therapy practitioners, scholars, and leaders within and beyond the profession of occupational therapy.

The mission of the Chatham University Entry Level Doctor of Occupational Therapy Program is to prepare and empower innovative, compassionate occupational therapy practitioners, scholars, and leaders to promote sustainable health and well-being among individuals, populations, and communities through the power of occupation.

The program learning outcomes are focused on six key areas. These include the following:

1. OT Clinical Skill Competencies & Practice Immersions: Demonstrate clinical competency in OT skills.
2. Practice Scholar Competencies & Capstone Experience: Conduct and disseminate scholarly work.
3. Leadership: Demonstrate a commitment to sustained professional growth and leadership.
4. Sustainable Health & Well-being: Promote sustainable health and well-being.
5. The Power of Occupation: Articulate and consistently apply the philosophical base of occupational therapy.
6. Professional Reasoning: Apply professional reasoning rooted in client-centered principles, research, evidence, and ethics.

For degree completion, students must complete all didactic courses, three Level I fieldwork experiences, two Level II fieldwork experiences, and a mentored doctoral capstone experience. 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 occupational therapy program via the Program Director for an extension of candidacy for a limited period if such extension is sought before the six years expires.

All occupational therapy courses are limited to occupational therapy students unless permission is obtained from the instructor and the program director.

Accreditation

Chatham University's Entry-Level Occupational Therapy Doctoral Degree Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. ACOTE's telephone number c/o AOTA is 301-652-6611, and its web address is www.acoteonline.org.

Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for

Certification in Occupational Therapy, Inc. (NBCOT), One Bank Street, Suite 300, Gaithersburg, MD 20878. Phone: 301-990-7979. www.nbcot.org

Entry-Level Doctorate of Occupational Therapy

99 credits

OTH601	Foundations of Occupation & Wellness (3)
OTH606	Functional Anatomy & Kinesiology (2)
OTH606L	Functional Anatomy & Kinesiology Lab (1)
OTH612	Evidence-Based Practice (2)
OTH620	Teaching & Learning in OT (2)
OTH626	Occupational Therapy Models of Practice & Occupational Science (3)
OTH629	Quantitative Research in OT (2)
OTH632	Environmental Interventions (1)
OTH635	Pediatric FW-IA & Seminar (1)
OTH636	Adult FW-IB & Seminar (1)
OTH638	Functional Neuroscience for OT (2)
OTH638L	Functional Neuroscience for OT Lab (1)
OTH639	Outcomes and Knowledge Translation (3)
OTH640	Degenerative Neurological Conditions (1)
OTH640L	Degenerative Neurological Conditions Lab (2)
OTH644	Community Fieldwork 1-C & Seminar (1)
OTH645	Professional Leadership & Management (3)
OTH647	Assistive Technology (1)
OTH648	Qualitative & Mixed Methods Research in OT (2)
OTH705	Psychosocial Topics in OT (1)
OTH705L	Psychosocial Topics in OT Lab (1)
OTH707	Introduction to Doctoral Capstone (3)
OTH715	OT in Advanced Practice (elective) (1)
OTH722	Pediatric Occupations Across Practice Settings (1)
OTH722L	Pediatric Occupations Across Practice Settings Lab (1)
OTH723	Occupational Performance in the Aging Population (4)
OTH723L	Occupational Performance in the Aging Population Lab (1)
OTH724	Biomechanics of Human Occupation (3)
OTH724L	Biomechanics of Human Occupation Lab (1)
OTH726	Pediatric Occupational Development & School based Practice (3)
OTH726L	Pediatric Occupational Development & School based Practice Lab (1)
OTH738	Doctoral Capstone Development I (3)
OTH741	Acquired Neurological Conditions (4)
OTH741L	Acquired Neurological Conditions Lab (1)
OTH747	Leadership & Professional Identity (1)
OTH748	Doctoral Capstone Development II (1)
OTH762	Fieldwork II-A (10)
OTH765	Fieldwork II-B (10)
OTH790	Doctoral Capstone (12)
OTH795	Doctoral Dissemination (2)

OTA to Entry-Level Doctorate of Occupational Therapy

This entry-level OTD program pathway is designed for licensed occupational therapy assistants, who have at least one year of clinical experience and a bachelor's degree and want to advance their license to the occupational therapist level. Enrolled students in this OTA to OTD bridge program take most of their coursework online with eight weekend campus visits to participate in interactive learning sessions. They follow the same curriculum as the traditional entry-level Doctorate of Occupational Therapy program, but the delivery methods are altered to account for their diverse practice experiences.

Occupational therapy assistants without a bachelor's degree can pursue a BS in Health & Wellness as a pathway to the OTA to OTD program. Bachelor's coursework is delivered online for a flexible school-work-life balance.

Occupational Therapy, Post-Professional (PPOTD)

The Post-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, enhance their clinical skills, and develop leadership skills in teaching, public policy, advocacy, and entrepreneurship. Each course is intricately connected to the professional student's practice focus, with students directly applying the learned concepts to their work or volunteer settings. 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.

To enter the program, students must be licensed as an occupational therapist and possess a master's degree. Since the program is designed with the working professional in mind, all courses occur online with no travel to campus required. Students typically take 2 courses at a time, with just 16 months required for program completion.

Graduates of the program will demonstrate advanced skills and achievement of the following program outcomes:

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.

Post-Professional Doctorate of Occupational Therapy

30 credits

OTD740	Occupational Science (3)
OTD741	Evidence-Based Practice (3)
OTD742	Advanced Practice Concepts and Skills (3)
OTD750	Occupational Therapist as Entrepreneur (3)
OTD751	Capstone Project Design (3)
OTD752	Education Theory and Technology (3)
OTD760	Leadership and Professionalism (3)
OTD761	Proposal Development (1)
OTD766	Methods of Evaluation (3)
OTD772	Capstone Implementation and Evaluation (5)

Bridge to Post-Professional Doctorate of Occupational Therapy Program

This post-professional OTD (PPOTD) program pathway is designed for experienced occupational therapists who hold a bachelor's degree in occupational therapy who wish to pursue the post-professional doctorate in occupational therapy. This pathway may also be recommended for candidates who have a master's degree in a field other than occupationsl therapy. Students admitted to the Bridge to Post-Professional OTD program will take one semester (3 courses/9 credits offered in fall only) of preparatory coursework before entering the traditional PPOTD program. The total credits for students in the Bridge to PPOTD is 39 — nine credits in the bridge semester and 30 credits in the traditional post-professional OTD program.

BRIDGE COURSES

9 credits

OTH690	Introduction to Evidence-Based Practice for Occupational Therapists (3)
OTH695	Models of Practice in Occupational Therapy (3)
ENG528	Academic Writing (3)

Physical Therapy (DPT)

The vision of the Chatham University DPT program is that graduates will improve the health care experience and optimize quality of life for all.

The mission of the Chatham University DPT program is to prepare exceptional professionals who meet the challenges of a dynamic healthcare system using science, compassion, and self-directed lifelong learning.

The Chatham University DPT program is committed to diversity, equity, and inclusion. As a community of students, educators, and clinicians, we value:

- A profession that reflects the diversity of society
- A culture of belonging
- Equitable educational opportunities
- Curricular and co-curricular support for professional success
- Health care access and delivery that is just

The program offers an innovative and student-centered curriculum that promotes clinical decision-making and produces professionals who are guided by integrity, committed to excellence, and oriented to service.

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.

Doctor of Physical Therapy

106 credits

REQUIRED COURSES

PTH502	Human Gross Anatomy (4)
PTH502L	Human Gross Anatomy Lab (2)
PTH506	Principles of Neuroscience (3)
PTH506L	Lab: Principles of Neuroscience (1)
PTH690	Clinical Skills (3)
PTH691	Clinical Sciences (6)
PTH702	Movement Science (3)
PTH703I	Musculoskeletal Physical Therapy Part One (2)
PTH703II	Musculoskeletal Physical Therapy-Part Two (10)
PTH706	Clinical Physiology (5)
PTH707	Cardiovascular and Pulmonary Physical Therapy (7)
PTH708	Pediatric Physical Therapy (4)
PTH709	Neuromuscular Physical Therapy (9)
PTH713I	Multi-System Physical Therapy Part One (1)
PTH713II	Multi-System Physical Therapy Part Two (2)
PTH722	Research I (3)
PTH724I	Research II Part One (1)
PTH724II	Research II-Part Two (1)
PTH741	Principles of Practice I: Intro to PT Practice (3)
PTH742I	Principles of Practice II: Communication and Ethics-Part One (1)
PTH742II	Principles of Practice II: Communication and Ethics-Part Two (2)
PTH743	Principles of Practice III: Ethical Action & Social Responsibility (1)
PTH744	Principles of Practice IV: Service Learning (1)
PTH745I	Principles of Practice V: Health Care, Management & Policy-Part One (1)
PTH745II	Principles of Practice V: Healthcare, Management & Policy-Part Two (2)
PTH748	Research III: Evidence in Practice (2)

CLINICAL EXPERIENCE

PTH730	Clinical Experience I-A (3)
PTH731I	Clinical Experience IB-I (1)
PTH731II	Clinical Experience IB-II (3)
PTH733	Clinical Experience II (7)

AND

PTH735I	Clinical Experience V-Part One (1) **AND**
PTH735II	Clinical Experience V-Part Two (11)
OR	
PTH746I	Clinical Experience III-Part One (1) **AND**
PTH746II	Clinical Experience III-Part Two (5) **AND**
PTH747	Clinical Experience IV (6)

Physician Assistant Studies (MPAS)

The MPAS program is a 24-month professional course of study designed to award the MPAS degree. The curriculum integrates advanced topics such as anatomy, physiology, pathophysiology, clinical intervention, pharmacology, research, clinical methods, and hands-on clinical experiences throughout the program. Graduates are trained to provide primary medical care with cultural humility, adhering to ethical, legal, and safety standards.

To succeed, students must develop self-directed learning skills to acquire and apply knowledge through clinical reasoning in medical practice. These skills are essential for maintaining up-to-date knowledge and delivering effective patient care. Success also requires self-awareness, an understanding of others, and a commitment to ongoing professional development beyond the degree.

Chatham University's MPAS program uses an integrated approach that combines Problem-Based Learning, lectures, hands-on training, and remote education to enable students to develop self-directed learning skills. This approach equips students for the evidence-based, problem-solving environment of clinical medicine. Students engage with patient cases, develop research topics, and collaborate in teams, receiving feedback on their knowledge and professionalism to prepare for primary care and focused clinical practice. Course content is integrated across subjects, enabling students to approach patient care holistically.

The MPAS program follows a competency-based, pass/fail grading system, requiring mastery of the necessary material. Specific pass/fail criteria are outlined in each course syllabus. Upon entry into the program, students agree to the electronic release of their academic information for faculty and staff to review academic standing and provide advising. To remain in the program and graduate, students must maintain good academic standing and successfully complete all required courses, including a final evaluation that assesses medical knowledge, interpersonal skills, patient care abilities, and professionalism.

Master of Physician Assistant Studies

85 credits

PAS600	Essentials for the PA I (9)
PAS601	Essentials for the PA II (9)
PAS602	Clinical Anatomy & Pathophysiology I (4)
PAS603	Clinical Anatomy & Pathophysiology II (4)
PAS606	Clinical Pharmacology I (2)
PAS607	Clinical Pharmacology II (2)

PAS612	Introduction to the PA Profession (1)
PAS613	Critical Reading of the Literature (1)
PAS614	Medical Ethics (1)
PAS617	Clinical Procedures (2)
PAS620	Introduction to Clinical Experience I (2)
PAS621	Introduction to Clinical Experience II (1)
PAS622	Introduction to Clinical Experience III (1)
PAS629	Summative Evaluation (1)
PAS630	Topics in Clinical Medicine (4)
PAS635	Healthcare Policy (1)
PAS636	Program to Practice (1)
PAS637	Clinical Skills for the PA I (4)
PAS638	Clinical Skills for the PA II (4)
PAS651	Advanced Clinical Medicine I (1)
PAS652	Advanced Clinical Medicine II (1)
PAS653	Advanced Clinical Medicine III (1)
PAS654	Advanced Clinical Medicine IV (1)

CLINICAL ROTATION COURSES

PAS640	Clinical Experience I (3)
PAS641	Clinical Experience II (3)
PAS642	Clinical Experience III (3)
PAS643	Clinical Experience IV (3)
PAS644	Clinical Experience V (3)
PAS645	Clinical Experience VI (3)
PAS646	Clinical Experience VII (3)
PAS647	Clinical Experience VIII (3)
PAS648	Clinical Experience IX (3)

Psychology (MAP)

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. The MA in Psychology program welcomes qualified students from diverse backgrounds and areas of study.

Master of Arts in Psychology

36 credits

REQUIRED CORE COURSES

PSY501	Foundations of Counseling Psychology (3)
PSY555	Statistics and Research Design (3)
PSY605	Biopsychology (3)
PSY617	Psychology of Culture and Identity (3)
PSY629	Human Development Across the Lifespan (3)
PSY657	Psychopathology & Resilience (3)
PSY642	Assessment (3)
PSY662	Counseling Theories and Techniques (3)
PSY672	Group Counseling (3)
PSY658	Evidence-Based Practice (3)
PSY681	Professional Integration Seminar (3)

CHOOSE ONE ELECTIVE

PSY 515	Human Sexuality (3)
PSY 530	Introduction to Sport and Exercise Psychology (3)
PSY 663	Foundations in Health Psychology (3)
PSY 665	Addictions Counseling (3)
PSY 668	Crisis, Trauma, and Recovery (3)
PSY 671	Mindfulness Counseling (3)
PSY 677	Grief Counseling (3)
PSY 693	Independent Study or Practicum (3)
PSYXXX	A graduate level course approved by the program director (3)

NOTE: Some MAP students will complete PSY682 Practicum as part of the MAP degree, depending upon the particular area of study, future career plans, and advisor and director input. Such MAP students should also familiarize themselves with the program's field placement handbook.

GRADUATE CERTIFICATE PROGRAMS

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 pending course availability.

12 credits

NUR503	Informatics Foundation and Health Care Technology (3)
NUR632	Curriculum Design and Evaluation in Nursing Education (3)
NUR642	Nurse Educator Role Development (3)
NUR652	Teaching Strategies and Technology for the Nurse Educator (3)

Falk School of Sustainability & Environment

UNDERGRADUATE MAJORS

- Environmental Science
- Food Studies
- Sustainability

UNDERGRADUATE MINORS

- Botany
- Food Studies
- Sustainability

GRADUATE PROGRAMS

- Master of Arts in Food Studies (MAFS)
- Master of Sustainability (MSUS)
- Master of Sustainability + MBA Dual Degree (MSUS/MBA)
- Master of Sustainable Community Planning (MSCP)
- Master of Environmental Management (MSEM)

UNDERGRADUATE MAJORS

Environmental Science

The environmental science 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.

BS in Environmental Science

REQUIRED CORE COURSES

40 credits

CHM107	**Chemistry I (3)**
CHM109L	**Chemistry I Lab (1)**
CHM108	Chemistry II (3)
CHM110L	Chemistry II Lab (1)
CHM205	Organic Chemistry I (3)
CHM215L	Elementary Organic Chemistry Lab (2)
ENV203	Dynamic Earth Systems (3)
ENV248	Ecology (3)
ENV248LW	Ecology Lab (2)
ENV303	Global Change Science (3)
ENV327W	Writing about the Environment (3)
ENV404	Quantitative Ecology (3)
ENV404L	Quantitative Ecology Lab (1)
SUS102	Sustainability and Society (3)
SUS201	Integrative Biology (3)
SUS201L	Integrative Biology Lab (1)
SUS350	**Skills for Sustainability Professionals (3)**
SUS352	GIS (3)
INTENV303	**Internship (3)**
MTH110	**Elementary Statistics (3)**
ENV490	Environmental Science Capstone (3)

***Bold courses** count as General Education credits

Conservation Science Concentration

15-22 credits

REQUIRED COURSES

ENV315	Conservation Science (3)
ENV471	Conservation in Practice (3)

CHOOSE TWO ELECTIVES

ENV247	Environmental Geology (3) **AND**
ENV247L	Environmental Geology Lab (1)
POL268	Environmental Policy

SUS322	Natural Resource Policy and Law
SUS355	Forestry
SUS401	Sustainable Policy & Decision Making

CHOOSE ONE

ENV204	Botany (3) **AND**
ENV204L	Botany Lab (2)
BIO303	Applied and Environmental Microbiology (3) **AND**
BIO303LW	Applied and Environmental Microbiology Lab (2)
ENV484	Plant Physiology (3) **AND**
ENV484L	Plant Physiology Lab (2)
ENV360	Field Ornithology (3)
ENV461	Aquatic Entomology (3) **AND**
ENV461L	Aquatic Entomology Lab (1)
SUS426	Sustainable Aquaculture (3)

Earth Science Concentration

15-21 credits

CHOOSE THREE ELECTIVES

CHM343	Environmental Chemistry (3)
ENV260	Physical Geology (3) **AND**
ENV260L	Physical Geology Lab (1)
ENV428	Environmental Hydrology (3)
ENV451	Soil Science (3)
MTH151	Calculus I (4)

CHOOSE TWO, AT MINIMUM ONE WITH LAB

ENV204	Botany (3) **AND**
ENV204L	Botany Lab (2)
BIO303	Applied and Environmental Microbiology (3) **AND**
BIO303LW	Applied and Environmental Microbiology Lab (2)
ENV484	Plant Physiology (3) **AND**
ENV484L	Plant Physiology Lab (2)
ENV360	Field Ornithology (3)
ENV461	Aquatic Entomology (3) **AND**
ENV461L	Aquatic Entomology Lab (1)
SUS426	Sustainable Aquaculture (3)

Food Studies

The Bachelor of Arts in Food Studies (BAFS) provides an interdisciplinary and applied approach to the study of food systems, culinary culture, and sustainable agriculture in local and global contexts. The program offers social, cultural, scientific, economic, environmental, and historical analyses combined with experiential learning in farm, kitchen, and community settings. Concentrations in food enterprise and food communications prepare students for multi-faceted careers in a wide variety of sectors.

BA in Food Studies

51 credits

REQUIRED COURSES

CHM107	General Chemistry I (3)
CMH109L	General Chemisty I Lab (1)
FST150	Food, Farm, and Field (3)
FST205	Food Science Principles and Practice (3)
FST215W	Global Foodways (3)
FST310PRO	Futures in Food Systems (1)
FST315	Food Access and Policy (3)
FST320	**Basic Agroecology (3)**
FST342	Sustainable Production (3)
FST490	Integrative Capstone (3)
SUS102	Sustainability and Society (3)

***Bold courses** count as General Education credits

Food Communications Concentration

This concentration offers an interdisciplinary exploration of sustainable food systems and food cultures, emphasizing different theories, practices, and modes of communication about food, farm, and fields in global, regional, and local contexts.

REQUIRED COURSES

COM101	Intro to Communications (3)
CST183	Representations of Race and Gender (3)
FST307W	Community and Food (3)
FST316	Writing Food Farm and Field (3)
FST323	Communicating Food Systems (3)
FST417	Safe Practices in Food & Agriculture (1)

CHOOSE TWO ELECTIVES

COM251	News Writing and Editing (3)
ENG303	Food and Identity (3)
ENG429	The Literary Cookbook (3)
ENV327W	Writing About Environment (3)
FST234	Food Cultures of Asian Diasporas (3)
FST250	International Cuisine (3)
FST302	Nutrition and Community (3)
FST402	Global Agriculture (3)
SUS470	Corporate Social Responsibility (3)

Food Enterprise Concentration

This concentration offers an interdisciplinary exploration of sustainable food production through the food system, from agriculture to culinary product development, understanding the theory and practice of food commodification in global, regional, and local contexts.

REQUIRED

ACC222	Accounting and Finance (3)
BUS105	Foundations of Business (3)
CST183	Representations of Race and Gender (3)
FST322	Coops, Markets, and Food Systems (3)
FST323	Communicating Food Systems (3)
FST417	Safe Practices in Food & Agriculture (1)

CHOOSE TWO ELECTIVES

FST234	Food Cultures of Asian Diasporas (3)
FST302	Nutrition and Community (3)
FST307W	Community and Food (3)
FST402	Global Agriculture (3)
SUS416	Sustainable Decision Analysis (3)
SUS426	Aquaculture (3)
SUS435W	Green and Social Innovation (3)
SUS 470	Corporate Social Responsibility (3)

Sustainability

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.

BS in Sustainability: Natural Resources Management Track

51 credits

REQUIRED COURSES

CHM102	Energy and the Environment (3)
CHM102L	Energy and the Environment Lab (1)
ENV203	Dynamic Earth Systems (3)
ENV327W	Writing about Environmental Science (3)
FST320	Basic Agroecology (3)
FST320L	Growing Sustainably Lab (1)
ENV404	Quantitative Ecology (3)
ENV404L	Quantitative Ecology Lab (1)
MTH110	**Statistics (3)**
SUS100	Sustainability Science (3)
SUS102	Sustainability & Society (3)
SUS201	**Integrative Biology (3)**
SUS201L	**Integrative Biology Lab (1)**
SUS210	Sustainability and Technology (3)
SUS322	Natl Resource Policy/Law (3)
SUS350	**Skills for Sustainability Professionals (2)**

SUS352	GIS: Skills and Applications (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainable Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)
SUS490	Sustainable Capstone (3)
INTSUS303	**Internship (3)**

***Bold courses** count as General Education credits

CHOOSE TWO ELECTIVES

ENV303	Global Change Science (3)
ENV461L	Aquatic Entomology and Lab (4)
SUS203W	Planetary Health: Human Health & Natural Systems (3)
SUS355	Forestry (3)

BA in Sustainability: Sustainable Business Track

49 credits

REQUIRED COURSES

BUS105	Foundations of Business (3)
BUS110	**Business Analytics I (3) OR**
MTH110	**Statistics**
ENV203	Dynamic Earth Systems (3)
ENV327W	Writing about Environmental Science (3)
FST320	Basic Agroecology (3)
FST320L	Growing Sustainably Lab (1)
SUS100	Sustainability Science (3)
SUS102	Sustainability & Society (3)
SUS201	**Integrative Biology (3)**
SUS201L	**Integrative Biology Lab (1)**
SUS210	Sustainability and Technology (3)
SUS350	**Skills for Sustainability Professionals (2)**
SUS352	GIS: Skills and Applications (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainable Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)
SUS435W	Green and Social Innovation (3)
SUS490	Sustainable Capstone (3)
SUS470	Corporate Social Responsibility (3)
INTSUS303	**Internship (3)**

***Bold courses** count as General Education credits

CHOOSE TWO ELECTIVES

BUS243	Principles of Marketing (3)
CMP283	Database Management Systems (3)
SUS330	Sustainable Cities (3)
SUS335	Renewable Energy and Society (3)
SUS436	Sustainable Energy Applications (3)

BS in Sustainability: Sustainable Energy and Urban Systems Track

49 credits

REQUIRED COURSES

BUS110	**Business Analytics I (3) OR**
MTH110	**Statistics**
ENV203	Dynamic Earth Systems (3)
ENV327W	Writing about Environmental Science (3)
FST320	Basic Agroecology (3)
FST320L	Growing Sustainably Lab (1)
IAR231	Green and Sustainable Design (3)
SUS100	Sustainability Science (3)
SUS102	Sustainability & Society (3)
SUS201	**Integrative Biology (3)**
SUS201L	**Integrative Biology Lab (1)**
SUS210	Sustainability and Technology (3)
SUS335	Renewable Energy and Society (3)
SUS350	**Skills for Sustainability Professionals (2)**
SUS352	GIS: Skills and Applications (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainable Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)
SUS460	Energy Policy (3)
SUS490	Sustainable Capstone (3)
INTSUS303	**Internship (3)**

***Bold courses** count as General Education credits

CHOOSE TWO ELECTIVES

BUS171	Information Systems & Operations (3)
CMP120	Introduction to Programming (3)
CMP283	Database Management Systems (3)
SUS330	Sustainable Cities (3)
SUS435	Green and Social Innovation (3)
SUS436	Sustainable Energy Applications (3)

BS in Sustainability: Self Designed Track

51 credits

REQUIRED COURSES

BUS110	**Business Analytics I (3) OR**
MTH110	**Statistics**
ENV203	Dynamic Earth Systems (3)
ENV327W	Writing about Environmental Science (3)
FST320	Basic Agroecology (3)
FST320L	Growing Sustainably Lab (1)
SUS100	Sustainability Science (3)
SUS102	Sustainability & Society (3)
SUS201	**Integrative Biology (3)**
SUS201L	**Integrative Biology Lab (1)**
SUS210	Sustainability and Technology (3)
SUS350	**Skills for Sustainability Professionals (2)**

SUS352	GIS: Skills and Applications (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainable Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)
SUS490	Sustainable Capstone (3)
INTSUS303	**Internship (3)**

***Bold courses** count as General Education credits

CHOOSE FIVE ELECTIVES

Electives can be filled with any non-Core SUS classes at a 200-level or higher, or other 200+ level courses that are approved by the program director. One of the courses should be writing-intensive.

BA in Sustainability Interdisciplinary Major

8 courses, exclusive of the integrative capstone

REQUIRED COURSES

ENV203	Dynamic Earth Systems (3)
SUS100	Sustainability Science (3)
SUS102	Sustainability and Society (3)
SUS330	Sustainable Cities (3)
SUS335	Renewable Energy and Society (3)
SUS380	Economics in a Changing World (3)
SUS401	Sustainabikity Policy and Decision Making (3)
SUS416	Sustainable Decision Analysis (3)

UNDERGRADUATE MINORS

Botany Minor

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.

19-22 Credits of Required Courses*

REQUIRED COURSES

BIO144	The Organism (3) **OR**
SUS201	Integrative Biology (3) **OR**
BIO129	Our Fragile Earth (3)
BIO144L	The Organism Lab (1) **OR**
SUS201L	Integrative Biology Lab (1) **OR**
BIO129L	Fragile Earth Lab (1)
ENV204	Botany (3)
ENV204L	Botany Lab (2)
CHM107	Chemistry I (3) **OR**
CHM102	Energy & the Environment (3)
CHM109L	Chemistry I Lab (1) **OR**
CHM 102L	Energy & the Environment Lab (1)

TWO (2) COURSES (MINIMUM 6 CREDITS) FROM THE LIST BELOW:

BIO250	Plants, People, and Environment (3)
ENV208	Backpacking and Natural History of Western PA (3)
ENV484/L	Plant Physiology (3-5)
FST150	Food, Farm, Field (3)
FST320/L	Basic Agroecology and Lab (4)
FST428	Tree Care (3)
SUS355	Forestry (3)

*Only 8 credits taken for the minor may also be counted toward the student's major.

Food Studies

16 credits

FST150	Food, Farm & Field (3)
FST250	International Cuisine (3)
FST315	Food Access and Policy (3)
FST320	Basic Agroecology (3)
FST320L	Growing Sustainably Lab (1)
FST342	Sustainable Production (3)

Sustainability*

Sustainability and Society Minor

15 credits

SUS100	Sustainability Science (3)
SUS102	Sustainability and Society (3)
SUS327W	Writing About the Environment (3)
SUS380	Economics in a Changing World (3)
SUS435	Green and Social Innovation (3)

Sustainable Business Studies Minor

15 credits

SUS102	Sustainability and Society (3)
SUS380	Economics in a Changing World (3)
SUS435	Green and Social Innovation (3)
SUS436	Sustainable Energy Applications (3)
SUS470	Corporate Social Responsibility (3)

Sustainable Energy and Urban Systems Minor

15 credits

SUS100	Sustainability Science (3)
SUS210	Sustainability and Technology (3)
SUS330	Sustainable Cities (3)
SUS352	GIS Software and Applications (3)
SUS436	Sustainable Energy Applications (3)

Sustainable Natural Resources Management Minor

15 credits

ENV303	Global Change Science (3)
SUS100	Sustainability Science (3)
SUS322	Natural Resource Policy and Law (3)
SUS355	Forestry (3)
SUS426	Sustainable Aquaculture (3)

*Only 8 credits may overlap between majors and minors.

GRADUATE DEGREE PROGRAMS

Food Studies (MAFS)

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 tied to both our local farm and culinary spaces as well as global contexts. Food studies is approached as 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 are core areas, depth electives, and applied courses which allow students to develop a shared knowledge base and community-based networks. Students gain interdisciplinary training and experiential knowledge, linking real world problems with ethics, theory, history, communication, and research skills. Areas of concentration with an open approach to electives include markets and business, communications and writing, and food systems.

Master of Arts in Food Studies

39 credits

REQUIRED COURSES

FST508	Food Systems (3)
FST509	Food Access (3)
FST510	Food Culture, History (3)
FST511	Research Methods (3)
FST520FE	Basic Agroecology (3)
FST690	Internship (0)
FST698	Thesis Seminar (3)

CHOOSE TWO DEPTH ELECTIVES

FST607	Sustainable Consumption (3)
FST505	Food and Representations (3)
FST530	Sustainable Gastronomy (3)
FST603	Food Journeys (3)
FST512	Practical Nutrition (3)
FST518	Business of Food and Agriculture (3)
FST625FE	Agricultural Policy (3)
FST524	Greenhouse Production (3)
FST522	GIS for Food and Agriculture (3)
FST600	Qualitative Interviewing (3)

CHOOSE FIVE OPEN APPLIED ELECTIVE

FST514	Wine, Ciders, Mead (3)
FST531	Sustainable Fermentation (3)
FST524	Greenhouse Production (3)
FST532FE	Sustainable Meat Production (3)
FST602	Culture and Culinary of Grains (3)
FST609	Dairy: From Pasture to Plate (3)
FST624	Chocolate: Politics and Pleasure (3)

SUGGESTED CONCENTRATIONS

Students design their course of study with their advisor. The suggested combinations below allow further skills development and more exploration in a specific area. Depth electives are included in these suggestions.

Markets and Business Concentration

BUS570	Global Business (3)
BUS641	Supply Chain Management (3)
FST505	Sustainable Nonprofit Management (3)
FST512	Practical Nutrition (3)
FST518	Business of Food and Agriculture (3)
FST522	GIS Food and Agriculture (3)
FST524	Greenhouse Production (3)
FST600	Qualitative Interviewing (3)
FST602	Global Agriculture (3)
SUS513	Principles and Practices of Sustainable Business (3)
SUS516	Sustainable Decision Analysis (3)
SUS535	Green and Social Innovation (3)

Communications and Writing Concentration

ENG585	Travel Writing (3)
ENG683	The Literary Cookbook (3)
FST503	Learning Through Food (3)
FST505	Food and Representations (3)
FST515	Writing About Food (3)
FST517	Writing About Food II (3)
FST522	GIS Food Agriculture (3)
FST530	Sustainable Gastronomy (3)
FST600	Qualitative Interviewing (3)
FST602	Global Agriculture (3)
FST603	Food Journeys (3)
SUS515	Environmental Communication (3)

Food Systems Concentration

BUS 41	Supply Chain Management (3)
FST503	Urban Agriculture (3)
FST512	Practical Nutrition (3)
FST518	Business of Food & Agriculture (3)
FST522	GIS for Food and Agriculture (3)
FST530	Sustainable Gastronomy (3)
FST600	Qualitative Interviewing (3)
FST602	Global Agriculture (3)
FST603	Food Journeys (3)
FST615	Food Labor Inequality (3)
FST607	Sustainable Consumption (3)
FST625FE	Agricultural Policy (3)

Sustainability

The Master of Sustainability foundation courses allow students to explore the nature of system analysis and sustainability as it relates to the ecological, economic, social and business world.

Skills for work and research courses provide research, communication and work related skills. 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.

Track electives allow students to explore in depth a particular area of sustainability study. Students may take more electives and are not limited to electives listed in SUS. Up to six hours of internship credit may count towards the area of specialization.

Master of Sustainability

30 credits

REQUIRED COURSE

SUS500	Essential Readings in Sustainability (0)
SUS510	Pursuing Sustainability through Governance (3)
SUS511	Project Design, Methods, and Evaluation (3) **OR**
FST511	Research Methods (3)
SUS513	Principles and Practices of Sustainable Business (3)
SUS514	Building Sustainable and Resilient Cities (3)
SUS515	Applied Ecology (3)
SUS525	Environmental Communications (3)
SUS698C	Final Project (3) **OR**
SUS699	Advanced Project in Sustainability (3)
SUS690	Internship (0) *Optional alternative to capstone*

CHOOSE ONE METHOD ELECTIVE

FST520FEL	Growing Sustainably Lab (1)
FST522	GIS: Food and Agriculture (3)
FST550	Sustainable Nonprofit Management (3)
FST625FE	Agricultural Policy (3)
SUS502	Sustainability and Systems (3)
SUS508	Environmental Statistics (3)
SUS517	Climate Change and Sustainability (3)
SUS619	The Water's Edge (3)
SUS683	Special Topics

CHOOSE TWO DEPTH ELECTIVES

FST508	Food Systems (3)
FST509	Food Access (3)
FST607	Sustainable Consumption (3)
SUS506	Sustainability and Policy: Water (3)
SUS520	Community Energy Systems (3)
SUS526	Sustainable Aquaculture (3)
SUS617	Pathways to a Renewable Future (3)
SUS619	The Water's Edge (3)
SUS640	Sustainable Community Development (3)

Sustainability + MBA Dual Degree (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 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.

Master of Sustainability + Master of Business Administration

54 credits

BUS652	Managerial Accounting (3)
BUS570	Global Business (3)
BUS576	Sustainable Human Capital (3)
BUS577	Information Systems and Business Analytics (3) **OR**
ACT580	Accounting Information Systems (3)
BUS639	Sustainability and Assessment Reporting (3)
BUS641	Sustainable Supply Chain Management (3)
BUS671	Marketing Management (3)
BUS672	Corporate Finance and Governance (3)
BUS698	Strategy and Entrepreneurship (3)
FST511	Research Methods (3)
SUS504	Foundations of Sustainability (3)
SUS510	Pursuing Sustainability through Governance (3)
SUS514	Building Sustainable and Resilient Cities (3) **OR**
SUS603	Sustainability: Ethics, Equity, Justice (3)
SUS516	Sustainable Decision Analysis (3)
SUS580	Sustainable Behavior Change (3) **OR**
SUS535	Applied Green and Social Innovation (3)
SUS601	Applied Ecology (3)
SUS605	Leadership for Transitions to Sustainability (3)
SUS690	Internship (0)
BUS699	Business Consulting Capstone (3) **OR**
SUS698C	Final Project (3)

Sustainable Community Planning (MSCP)

Master of Sustainable Community Planning

36 credits

REQUIRED COURSE

SUS500	Essential Readings in Sustainability (0)
SUS510	Pursuing Sustainability through Governance (3)
SUS511	Project Design, Methods, and Evaluation (3) **OR**
FST511	Research Methods (3)
SUS514	Building Sustainable and Resilient Cities (3)
SUS516	Sustainable Decision Making (3)
SUS525	Environmental Communications (3)
SUS604	Sustainable Land Use (3)
SUS606	Urban Planning and Political Ecology (3)
SUS640	Sustainable Community Development (3)
SUS690	Internship (0)
SUS699	Advanced Project in Sustainability (3)

CHOOSE ONE METHOD ELECTIVE

FST522	GIS: Food and Agriculture (3)
FST550	Sustainable Nonprofit Management (30
SUS502	Sustainability and Systems (3)
SUS508	Environmental Statistics (3)
SUS517	Climate Change and Sustainability (3)
SUS683	Special Topics

CHOOSE ONE DEPTH ELECTIVES

FST508	Food Systems (3)
FST509	Food Access (3)
FST607	Sustainable Consumption (3)
SUS506	Sustainability and Policy: Water (3)
SUS520	Community Energy Systems (3)
SUS535	Applied Green and Social Innovation (3)
SUS617	Pathways to a Renewable Future (3)
SUS619	The Water's Edge (3)
SUS683	Special Topics

Sustainable Environmental Management (MSEM)

Master of Sustainable Environmental Management

30 credits

REQUIRED COURSES

SUS500	Essential Readings in Sustainability (0)
SUS508	Environmental Statistics (3)
SUS510	Pursuing Sustainability through Governance (3)
SUS513	Principles and Practices of Sustainable Business (3)
SUS516	Sustainable Decision Analysis(3)
SUS525	Environmental Communications (3)
SUS535	Applied Green and Social Innovation (3)
SUS690	Internship (0)
SUS698C	Final Project (3) **OR**
SUS699	Advanced Project in Sustainability (3) **OR**
BUS698	Business Capstone (3)

CHOOSE ONE MANAGEMENT ELECTIVE

ACT540	Governement and onprofist Accounting (3)
BUS577	Information Systems and Analytics (3)
BUS618	Economics for Managers (3)
BUS639	Sustainability Assessment and Reporting (3)
BUS641	Sustainable Supply Chain Management (3)
FST550	Sustainable Nonprofit Management (3)

CHOSE ONE ENVIRONMENT ELECTIVE

BIO532	Biostatistics (3)
FST520FE	Basic Agroecology (3)
SUS517	Cimate Change and Sustainability (3)
SUS526	Sustainable Aquaculture (3)
SUS604	Sustainable Land Use (3)
SUS606	Urban Planning and Politial Ecology
SUS619	The Water's Edge

CHOOSE ONE POLICY & IMPLEMENTATION ELECTIVE

FST509	Food Access (3)
FST607	Sustainable Consumtion (3)
FST625FE	Agricultural Policy (3)
SUS506	Sustainability and Policy: Water (3)
SUS520	Community Energy Systems (3)
SUS617	Pathways to a Renewable Future (3)

School of Business & Enterprise

UNDERGRADUATE MAJORS

- Accounting
- Data Science Analytics
- Economics
- International Business
- Management
- Marketing
- Sports Management

UNDERGRADUATE MINORS

- Accounting
- Applied Machine Learning
- Business
- Data Science Analytics
- Economics
- Management
- Management Information Systems
- Marketing

GRADUATE PROGRAMS

- Master of Business Administration (MBA)

GRADUATE CERTIFICATES

- Entrpreneurship Certificate
- Project Management Certificate
- Sustainability Management Certificate

UNDERGRADUATE MAJORS

Accounting

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.

BA in Accounting

18 courses

CORE COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS243	Principles of Marketing (3)
BUS257	Business Law & Business Ethics (3)
BUS272	Principles of Finance (3)
BUS310W	Business Analytics II (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ACT490	Integrative Capstone (3)

REQUIRED ACCOUNTING COURSES

ACT322	Intermediate Accounting I (3)
ACT323	Intermediate Accounting II (3)
ACT324	Individual Tax Accounting (3)
ACT412	Auditing (3)

CHOOSE ONE ELECTIVE

ACT480	Accounting Information Systems (3)
CMP283	Database Management Systems (3)

BA in Accounting Interdisciplinary Major

10 courses, exclusive of the integrative capstone

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
ACT322	Intermediate Accounting I (3)
ACT323	Intermediate Accounting II (3)
ACT324	Individual Tax Accounting (3)
ACT412	Auditing (3)
BUS110	Business Analytics I (3)
BUS257	Business Law and Business Ethics (3)

BUS310W	Business Analytics II (3) **OR**
XXX490	Prerequisite course for Capstone in the other discipline (3)

CHOOSE ONE ELECTIVE

ACT480	Accounting Information Systems (3)
CMP283	Database Management Systems (3)

Data Science Analytics

Big data is transforming industry, science, and society, creating an urgent need for individuals with complex data analytics skills. The data science analytics curriculum spans key areas of statistics, data visualization, computing, mathematics, and ethics. Students learn to apply theoretical principles to solving real-world interdisciplinary problems.

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

BS In Data Science Analytics

18 courses

REQUIRED COURSES

BUS110	Business Analytics I (3) **OR**
MTH110	**Elementary Statistics (3)**
BUS310W	Business Analytics II (3)
BUS421	Information and Cybersecurity (3)
CMP120	Introduction to Programming (3)
CMP283	Database Management Systems (3)
DSA490	Integrative Capstone (3)
DSA250	Fundamentals of Data Science (3)
DSA400W	Data Visualization & Communication (3)
DSA411	Machine Learning and AI (3)
MTH151	Calculus I (4)
MTH152	Calculus II (4)
MTH221	Linear Algebra (3)
MTH222	Multivariate and Vector Calculus (3)
MTH244	Discrete Math (3)
MTH310	Probability (3)

CHOOSE NINE CREDITS OF ELECTIVES

ART261	Web Design I: Code + Aesthetics (3)
BUS317	Systems Analysis and Design (3)
BUS450	Advanced Database Systems (3)
CMP220	Computer Programming II (3)
DSA200	Data Science Ethics (3)
ENV404	Quantitative Ecology (3)
MTH215W	Introduction to Proof (4)
MTH241	Differential Equations (3)

MTH256	The History and Theory of Numbers (3)
MTH327	Advanced Analysis (3)
PHI121	Introduction to Logic (3)

***Bold courses** can also count for GenEd requirements

BS in Data Science Analytics Interdisciplinary Major

11 courses, exclusive of Integrative Capstone

BUS110	Business Analytics I (3) **OR**
MTH110	**Elementary Statistics (3)**
BUS310W	Business Analytics II (3)
BUS421	Information and Cybersecurity (3)
CMP120	Introduction to Programming (3)
CMP283	Database Management Systems (3)
DSA250	Fundamentals of Data Science (3)
DSA400W	Data Visualization and Communication (3)
DSA411	Machine Learning and AI (3)
MTH151	Calculus I (4)
MTH152	Calculus II (4)
MTH221	Linear Algebra (3)

Complete DSA490 Integrative Capstone or Capstone in other discipline.

Economics

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 students 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.

BA in Economics

18 courses

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS243	Principles of Marketing (3)
BUS257	Business Law & Business Ethics (3)
BUS272	Principles of Finance (3)
BUS310W	Business Analytics II (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ECN330	Global Financial System & the Macro Economy (3)
ECN331	Managerial Economics (3)
ECN490	Integrative Capstone (3)

CHOOSE THREE ELECTIVES

ECN262	Global Environmental Economics (3)
ECN351	International Trade and Finance (3)
ECN355	Economic Analysis of Public Policy (3)
ECN358W	Economic Development (3)
ECN410	Econometrics (3)

BA in Economics Interdisciplinary Major

10 courses, exclusive of Integrative Capstone

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS310W	Business Analytics II (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ECN330	Global Financial System & the Macro Economy (3)
ECN331	Managerial Economics (3)

CHOOSE TWO ELECTIVES

ECN262	Global Environmental Economics (3)
ECN351	International Trade and Finance (3)
ECN355	Economic Analysis of Public Policy (3)
ECN358W	Economic Development (3)

Complete ECN490 Integrative Capstone or Capstone in other discipline.

International Business

Students majoring in international business 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.

BA in International Business

18 courses + Language Proficiency through Intermediate Level

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS240	International Business (3)
BUS243	Principles of Marketing (3)
BUS257	Business Law & Business Ethics (3)

BUS272 Principles of Finance (3)
BUS310W Business Analytics II (3)
BUS357 Strategy and Entrepreneurial Ventures (3)
BUS413 Operations (3)
ECN101 Principles of Macroeconomics (3)
ECN102 Principles of Microeconomics (3)
ECN351 International Trade and Finance (3)
BUS490 Integrative Capstone (3)
Language proficiency through intermediate level

CHOOSE TWO ELECTIVES
BUS462 Global Procurement (3)
ECN262 Global Environmental Economics (3)
ECN330 Global Financial System and the Macro Economy (3)
ECN358W Economic Development (3)
SUS470 Corporate Social Responsibility (3)

Complete BUS490 Integrative Capstone or Capstone in other discipline.

BA in International Business Interdisciplinary Major

10 courses, exclusive of Integrative Capstone

REQUIRED COURSES
ACT222 Financial Accounting Principles I (3)
BUS105 Foundations of Business (3)
BUS110 Business Analytics I (3)
BUS240 International Business (3)
BUS243 Principles of Marketing (3)
BUS310W Business Analytics II
ECN101 Principles of Macroeconomics (3)
ECN102 Principles of Microeconomics (3)
ECN351 International Trade and Finance (3)
Language proficiency through intermediate level or fluency in two languages

CHOOSE ONE ELECTIVE
BUS395W Leadership and Management (3)
BUS413 Operations (3)
BUS462 Global Procurement (3)
ECN262 Global Environmental Economics (3)
ECN330 Global Financial System and the Macro Economy (3)
ECN358W Economic Development (3)

Management

Students majoring in management at Chatham cultivates strong leadership and entrepreneurial skills through both academic coursework, and real-world applications. Graduates are prepared to address challenges in business strategy, talent acquisition, leadership, operations, finance, and the implementation of sustainable business practices.

BA in Management

18 courses

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS243	Principles of Marketing (3)
BUS257	Business Law & Business Ethics (3)
BUS272	Principles of Finance (3)
BUS310W	Business Analytics II (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS390	Human Resources Management (3)
BUS395W	Leadership and Management (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ECN331	Managerial Economics (3)
BUS490	Integrative Capstone (3)

CHOOSE TWO ELECTIVES

BUS210	US Labor Market & Worker Rights (3)
BUS240	International Business (3)
BUS319	Professional Selling (3)
BUS413	Operations (3)
BUS452	Managing Nonprofit Organizations (3)
BUS462	Global Procurement (3)
SPT150	Sports Management (3)
SUS470	Corporate Social Responsibility (3)

BA in Management Interdisciplinary Major

10 courses, exclusive of Integrative Capstone

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS257	Business Law & Business Ethics (3)
BUS310W	Business Analytics (3) **OR**
	Prerequisite course for Capstone in the other discipline

BUS390	Human Resources Management (3) **OR**
BUS395W	Leadership and Management (3) **OR**
BUS452	Managing Nonprofit Organizations (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
ECN331	Managerial Economics (3)
ECN490	Integrative Capstone (3)

CHOOSE ONE ELECTIVE

BUS240	International Business (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS413	Operations (3)
BUS462	Global Procurement (3)
SUS470	Corporate Social Responsibility (3)

Marketing

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 business 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, sustainability practices, and a rapidly expanding global economy.

BA in Marketing

18 courses

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS243	Principles of Marketing (3)
BUS244	Consumer Behavior (3)
BUS257	Business Law & Business Ethics (3)
BUS272	Principles of Finance (3)
BUS310W	Business Analytics II (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS445	Marketing Strategy (3)
ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)
BUS490	Integrative Capstone (3)

CHOOSE THREE ELECTIVES

BUS319	Professional Selling (3)
BUS312	Marketing Research (3)

BUS350	Advertising and Promotion (3)
BUS496	Digital Marketing (3)
COM234	Persuasion (3)
SPT150	Sports Management (3)
SUS470	Corporate Social Responsibility (3

BA in Marketing Interdisciplinary Major

10 courses, exclusive of Integrative Capstone

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS243	Principles of Marketing (3)
BUS244	Consumer Behavior (3)
BUS310W	Business Analytics II (3)
BUS445	Marketing Strategy (3)
ECN102	Principles of Microeconomics (3)

CHOOSE TWO ELECTIVES

BUS350	Advertising and Promotion (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS395W	Leadership and Management (3)
BUS496	Digital Marketing (3)
SUS470	Corporate Social Responsibility (3)

Complete BUS490 Integrative Capstone or Capstone in other discipline.

Sports Management

The sports management major equips students with skills in data analytics, finance, marketing, and leadership tailored to the sports industry. Coursework and experiential learning builds expertise in athlete representation, event planning, facility management, and sports promotion. Graduates pursue careers in sport franchises, marketing agencies, athletic departments, and event management firms.

BS in Sports Management

18 courses

REQUIRED CORE COURSES

ACT222	Financial Accounting Principles I (3)
BUS105	Foundations of Business (3)
BUS110	Business Analytics I (3)
BUS230W	Organizational Behavior (3)
BUS243	Principles of Marketing (3)
BUS257	Business Law & Business Ethics (3)
BUS272	Principles of Finance (3)
BUS310W	Business Analytics II (3)
BUS490	Integrative Capstone (3)

ECN101	Principles of Macroeconomics (3)
INTBUS303	Internship
SUS102	Sustainability and Society (3)

REQUIRED MAJOR COURSES

SPT150	Introduction to Sports Management (3)
SPT175	Economics of Sports Management (3)
SPT200	Sports and Event Venue Management (3)
SPT250	Law and Ethics in Sports Management (3)
SPT275	Marketing and Public Relations of Sports Management (3)
SPT300	Budget and Finance in Sports Management (3)
SPT350	Sports Sales & Promotions (3)
SPT375	Sports Management Analytics & Intelligence (3)
SPT450	Sports Management Strategy (3)
SUS470	Corporate Social Responsibility (3)

UNDERGRADUATE MINORS

No more than two courses can overlap between a minor and a major. If your chosen minor and major overlap by more than two courses, you need to take additional substitution courses for the minor so that we are using no more than two courses for both minor and major.

Accounting Minor

The accounting minor complements both business and non-business majors with skills related to basic bookkeeping, balance sheets, tax accounting and auditing. Students gain technical knowledge as well as critical thinking and communication skills necessary for effective financial management in public, private, non-profit, or government settings.

6 courses

REQUIRED COURSES

ACT222	Financial Accounting Principles I (3)
ACT223	Managerial Accounting Principles (3)
ACT322	Intermediate Accounting I (3)
ACT323	Intermediate Accounting II (3)
ACT324	Individual Tax Accounting (3)

CHOOSE ONE ELECTIVE

ACT412	Auditing (3)
ACT480	Accounting Information Systems (3)
CMP283	Database Management Systems (3)

OR course approved by Program Director

Applied Machine Learning Minor

The applied machine learning minor equips students with foundational concepts in building algorithms, conducting data analysis, and developing quantitative models. Students learn to implement artificial intelligence techniques to detect patterns within the data, interpret results, and effectively communicate insights to support business innovation and decision-making.

19 credits

CMP120	Introduction to Programming (3)
DSA250	Fundamentals of Data Science (3)
DSA411	Machine Learning and AI (3)
MTH110	Elementary Statistics (3)
MTH151	Calculus I (4)
MTH244	Discrete Mathematics (3)

Business Minor

A minor degree in business addresses the core business principles of management, marketing, and finance. It adds value to other majors with foundational skills in managing a business, tracking and growing its assets, understanding market conditions, and serving customer needs. A business minor can enhance career prospects in a variety of professions.

6 courses

REQUIRED COURSES

BUS105	Foundations of Business (3)
ECN101	Principles of Macroeconomics (3) **OR**
ECN102	Principles of Microeconomics (3)
ACT222	Financial Accounting Principles I (3)
BUS243	Principles of Marketing (3)

CHOOSE TWO ELECTIVES

ACT324	Individual Tax Accounting (3)
BUS350	Advertising and Promotion (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS390	Human Resources Management (3)
BUS395W	Leadership and management (3)
BUS413	Operations (3)
BUS445	Marketing Strategy (3)
BUS452	Managing Nonprofit Organizations (3)
BUS462	Global Procurement (3)
BUS496	Digital Marketing (3)
ECN 351	International Trade & Finance (3)
ECN358W	Economic Development (3)
SUS470	Corporate Social Responsibility (3)

OR course approved by Program Director

Data Science Analytics Minor

A minor degree in data science analytics equips students with skills in statistical analysis, data visualization, and predictive modeling. The minor supports science-driven decision making in a variety of professions with expertise in extracting and communicating actionable insights from complex data sets.

6 courses

BUS110	Business Analytics I (3) **OR**
MTH110	**Elementary Statistics (3)**
BUS421	Information and Cybersecurity (3)
CMP120	Introduction to Programming (3)
CMP283	Database Management Systems (3)
DSA250	Fundamentals of Data Science (3)
DSA400W	Data Visualization & Communication (3)

Economics Minor

The economics minor provides a diverse array of business skills in such areas as supply and demand concepts, macrotrend analysis, trade and finance, and the global economy. This minor can be combined with a business or a non-business major to increase the range of career path options or graduate study in law, policy, business, or other disciplines.

6 courses

REQUIRED COURSES

ECN101	Principles of Macroeconomics (3)
ECN102	Principles of Microeconomics (3)

CHOOSE FOUR ELECTIVES

ECN330	Global Financial System and the Macro Economy (3)
ECN331	Managerial Economics (3)
ECN262	Global Environmental Economics (3)
ECN351	International Trade and Finance (3)
ECN355	Economic Analysis of Public Policy (3)
ECN358	Economic Development (3)

Management Minor

A minor degree in management provides students with essential skills in leadership, organizational behavior, and strategy development. It complements degrees in other academic disciplines with its emphasis on effective team coordination and business planning to prepare students for managerial roles in a variety of organizational settings.

6 courses

REQUIRED COURSES

BUS105	Foundations of Business (3)
BUS357	Strategy and Entrepreneurial Ventures (3)
BUS390	Human Resource Management (3)
BUS395W	Leadership and Management (3)

CHOOSE TWO ELECTIVES

BUS240	International Business (3)
BUS452	Managing Nonprofit Organizations (3)
BUS413	Operations (3)
BUS462	Global Procurement (3)
ECN331	Managerial Economics (3)
SUS470	Corporate Social Responsibility (3)

Management Information Systems Minor

The management information systems (MIS) minor focuses on the integration of technology and business processes to improve organizational efficiency. It equips students with skills in managing IT systems, analyzing data, and leveraging technology to support effective internal and external information management and dissemination.

6 courses

REQUIRED COURSES

BUS105	Foundations of Business (3)
CMP120	Introduction to Programming (3)
CMP283	Database Management Systems (3)

CHOOSE THREE ELECTIVES

ART261	Web Design I: Code + Aesthetics (3)
BUS317	Systems Analysis and Design (3)
DSA411	Machine Learning and AI (3)
BUS421	Information and Cybersecurity (3)
BUS450	Advanced Database Systems (3)

Marketing Minor

A minor degree in marketing provides students with foundational knowledge in industry analysis, competitive intelligence, consumer behavior, strategy development, and integrated communications techniques. The emphasis on experiential learning hones students' abilities to develop and implement effective business growth initiatives across industries and settings.

6 courses

REQUIRED COURSES

BUS105	Foundations of Business (3)
BUS243	Principles of Marketing (3)
BUS244	Consumer Behavior (3)

CHOOSE THREE ELECTIVES

BUS319	Professional Selling (3)
BUS350	Advertising and Promotion (3)
BUS445	Marketing Strategy (3)
BUS496	Digital Marketing (3)
COM234	Persuasion (3)
SUS470	Corporate Social Responsibility (3)

GRADUATE DEGREE PROGRAMS

Business Administration

Chatham's Masters of Business Administration program prepares students to excel in today's competitive job market. This IACBE-accredited 30 credit one year program equips students with core business skills in strategic planning, business analytics, entrepreneurship, leadership, global marketing, and effective communication. MBA concentrations include accounting, business analytics, entrepreneurial leadership, finance, healthcare management, project management, sustainability, and self-designed options. Students can attend full-time or part-time, fully online or in person, and start the program in the fall, spring, or summer sessions.

Master of Business Administration

30 credits

REQUIRED CORE COURSES

ACT573	Business Law & Ethics (2)
BUS576	Sustainable Human Capital (3)
BUS577	Business Analytics (3)
BUS652	Managerial Accounting (3)
BUS671	Global Marketing (3)
BUS672	Corporate Finance & Governance (3)
BUS698	Strategy for Business Resilience (3)
BUS699	MBA Summit (1)

REQUIRED ACCOUNTING CONCENTRATION COURSES

ACT512	Auditing (3)
ACT620	Advanced Financial Accounting (3)
ACT630	Advanced Tax Accounting (3)

REQUIRED BUSINESS ANALYTICS CONCENTRATION COURSES

BUA565	Storytelling with Data (3)
BUA595	Spreadsheet Modeling for Decision-Making (3)
BUA635	Python for Business Analytics (3) **OR**
BUA685	Managing AI Projects (3)

REQUIRED ENTREPRENEURIAL LEADERSHIP AND STRATEGY CONCENTRATION COURSES

BUS550	Innovation and Commercialization (3) **OR**
BUS552	Managing Non-Profit Organizations (3)
BUS570	Global Business (3)
BUS623	Strategic Performance for Executives (3)

REQUIRED FINANCE CONCENTRATION COURSES

FIN674	Capital Markets and Investing (3)
FIN676	Financial Statements Analysis & Valuation (3)
FIN678	Frontiers of Finance (3)

REQUIRED HEALTHCARE MANAGEMENT CONCENTRATION COURSES

HCM500 Structure & Economics of the US Healthcare System (3)
HCM550 Management of Healthcare Organizations (3)
HCM575 Data Analysis for Healthcare Managemen (3) **OR**
HCM600 Healthcare Finance (3)

REQUIRED PROJECT MANAGEMENT CONCENTRATION COURSES

BUS575 Leading Organizations and Projects (3)
BUS582 Foundations of Project Management (3)
BUS680 Complex Issues in Project Management (3)

REQUIRED SUSTAINABILITY CONCENTRATION COURSES

BUS641 Susatainable Supply Chain Management (3)
SUS535 Applied Green and Social Innovation (3)
SUS516 Sustainable Decision Analysis (3) **OR**
BUS639 Sustainability and Assessement Reporting (3)

REQUIRED SELF-DESIGNED COURSES

Choose any three courses (9 credits total) from those listed above

GRADUATE CERTIFICATE PROGRAMS

The School of Business and Enterprise offers three graduate certificates, each comprised of nine credits of coursework. These credentials reflect specialized business knowledge in high demand across business sectors. Completed certificates can be "stacked" to apply toward Chatham's 30-credit Master of Business Administration degree. The nine credits for a given certificate can be completed in one semester or spread out across multiple semesters.

Entrepreneurship Certificate

BUS570 Global Business (3)
BUS550 Innovation and Commercialization (3)
BUS671 Global Marketing (3)

Project Management Certificate

BUS575 Leading Organizations and Projects (3)
BUS582 Foundations of Project Management (3)
BUS680 Complex Issues in Project Management (3)

Sustainability Management Certificate

SUS535 Applied Green and Social Innovation (3)
BUS639 Sustainability and Assessment Reporting (3)
BUS641 Sustainable Supply Chain Management (3)

chatham UNIVERSITY

COURSE DESCRIPTIONS

2024-2025

COURSE NUMBER KEY

FE = Field Experience
L = Lab
S = Studio
W = Writing Intensive

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ACT: ACCOUNTING

ACT222 Financial Accounting Principles I (3)
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)
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.
Prerequisite: ACT222

ACT322 Intermediate Accounting I (3)
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)
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.
Prerequisite: ACT322

ACT324 Individual Tax Accounting (3)
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.
Prerequisite: ACT222

ACT412 Auditing (3)
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.
Prerequisite: ACT323

ACT480 Accounting Information Systems (3)
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.
Prerequisite: ACT222

ACT490 Integrative Capstone (3)
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.
*Prerequisite: BUS310W **or** BUS312W*

ACT512 Auditing (3)
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.

ACT540 Government and Non-Profit Accounting (3)
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.

ACT573 Business Law and Ethics (2)
This course addresses essential areas of business law including Corporate Governance, Securities Regulation, Intellectual Property and Employment Law. Students apply a stakeholder lens to assess and reconcile ethical challenges arising from competing objectives in in the workplace. Cases and activities foster legal and ethical business principles.

ACT580 Accounting Information Systems (3)
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.

ACT620 Advanced Financial Accounting (3)
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)
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.

ART: ART

ART103 Intro to Visual Culture (3)
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.

ART111S Ceramics I (3)
This introduction to handbuilding and wheel-throwing fosters creative expression through skill development, historical study, critical thinking, and discussion. Projects focus on three-dimensional design and sculpture as well as functional ceramic wares. Students will learn to develop surface effects and test interactions of ceramic materials using glazes and underglazes. Additional Fee(s): Applied art fee.

ART115S Painting I (3)
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.

ART117S Drawing I (3)
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.

ART127S Printmaking I (3)
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.

ART131 History of World Art I: Prehistory to 1400 (3)
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)
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.

ART141 Media Literacy (3)
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 art fee.

ART142S Photography I : Black and White Darkroom (3)
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 art fee.

ART152S Photography II - Introduction to Digital Photography (3)
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 art fee.

ART205S Sculpture Studio (3)
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.

ART208 Introduction to Museum Studies (3)
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.

ART210 History of Photography (3)
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.

ART211S Ceramics Studio (3)
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.
Prerequisite: ART111S

ART213 Special Topics (3)
Special Topics

ART214S Design Studio (3)
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.

ART215S Painting Studio (3)
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.
Prerequisite: ART115S

ART217S Drawing Studio (3)
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.
Prerequisite: ART117S

ART220S Material Studies Studio (3)
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. Additional Fee(s): Applied art fee.

ART225S Typography Design Studio (3)
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 art fee.

ART227S Printmaking Studio (3)
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.
Prerequisite: ART127S

ART230W Women and Art (3)
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.

ART231 Italian Renaissance Art: Creating the Modern West (3)
This course examines the most dynamic period in Western art, beginning with the first stirrings of humanism around 1300 and placing equal emphasis on the achievements of the artists of the Early Renaissance (Ghiberti, Donatello, Masaccio, Botticelli) and those of the High Renaissance (Leonardo, Michelangelo, Raphael, Titian) to 1550.

ART234 The Baroque: Art and Propaganda (3)
This course explores the roles art played in the 17th-century rise of nation states and religious change. It uses the lives and works of leading artists (Bernini, Velazquez, Rubens, Rembrandt) as case studies to examine not only how they advanced art but also shaped the nations' political and religious mores.

ART241S Lighting Principles (3)
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.

ART245S Design Praxis (3)
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 art fee.

ART247S Photography III - Advanced Digital Imaging (3)
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 art fee.

ART248 19th-Century Europe: Art and Revolution (3)
Investigating the major movements in France, England, Germany, and other European countries (Romanticism, Realism, the Pre-Raphaelites, Impressionism), this course traces revolutionary changes from the dominance of the academies to the birth of modernism, focusing on art, architecture, photography, and printmaking as impacted by war, urbanization, industrialization, race, and gender issues.

ART254 Modern Art, 1900 to the Present (3)
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.

ART261S Web Design 1: Code + Aesthetics (3)
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 art fee.
Prerequisites: FDT210 ***and*** *FDT220*

ART271 Asian Art (3)
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.

ART305S Sculpture Studio (3)
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.
Prerequisite: ART205S

ART309W Art + Land: Artists Engage the Environment (3)
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.

ART311S Ceramics Studio (3)
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.
Prerequisite: ART211S

ART313 Special Topics (3)
Special Topics

ART315S Painting Studio (3)
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.
Prerequisite: ART215S

ART317S Drawing Studio (3)
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.
Prerequisite: ART217S

ART320S Material Studies Studio (3)
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. Additional Fee(s): Applied art fee.
Prerequisite: ART220S

ART327S Printmaking Studio (3)
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.
Prerequisite: ART227S

ART328 The Carnegie International (3)
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 this type, the globalized art market, and current media techniques and broader concerns of visual artists working today.

ART353S Print Design (3)
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 art fee.
*Prerequisites: ART225S **and** ART245S*

ART360 Professional Practices (3)
This course teaches practical methods for building and maintaining an artistic practice, explores art careers, and develops research, documentation, and self-promotion skills. Students will enhance communication abilities, create professional materials, and engage with contemporary and historical art practices, while examining the role of art in society.

ART365S Visual Communication (3)
This course explores visual communication design systems in the context of political, cultural, and social influences that shape the production of typography, posters, publications, advertising, brand identities, and interactive design. Students are asked to consider how the work of past designers is relevant to contemporary design practices.

ART366 American Art to 1900: Who We Are (3)
Essential learning for those intrigued by the forces that shape America today, this course explores art's development from the first stirrings in the 1590s to American artists' successful competition on an international stage. Special attention is paid to works that address definitions of American "identity" and cultural contact between races.

ART368 Museum Education (3)
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.
Prerequisite: ART208

ART370S Digital Illustration Methods (3)
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.

ART372 Curating African Art and Artifacts (3)
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.

ART378 Curating the Visual Arts (3)
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.
Prerequisite: ART208

ART388 Landscape Photography (3)
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 art fee.
*Prerequisite: ART152S **or** FDT150S*

ART405S Sculpture Studio (3)
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.
Prerequisite: ART305S

ART411S Ceramics Studio (3)
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.
Prerequisite: ART311S

ART415S Painting Studio (3)
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.
Prerequisite: ART315S

ART417S Drawing Studio (3)
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.
Prerequisite: ART317S

ART420S Material Studies Studio (3)
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.
Prerequisite: ART320S

ART427S Printmaking Studio (3)
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.
Prerequisite: ART327S

ART483S Event Photography (3)
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 art fee.
*Prerequisite: ART142S **or** ART152S*

ART489S Portfolio (3)
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.
*Prerequisites: ART225S **and** ART245S*

ART490 Integrative Capstone (3)
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.
Prerequisite: FDT300W

ART492 Independent Study (2)
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.
Prerequisite: Permission of Instructor

ART493 Independent Study (3)
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.
Prerequisite: Permission of Instructor

ATH: ATHLETIC TRAINING

ATH500 Prevention and Care of Emergency Medical Conditions (3)
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.

ATH501 Therapeutic Modalities (4)
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.
Corequisite: ATH500

ATH502 Introduction to Professional Practice (2)
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.

ATH503 Orthopedic and Neurologic Assessment I (4)
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.

ATH504 Orthopedic and Neurologic Assessment II (4)
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.
Prerequisite: ATH503

ATH505 Medical Management of an Athletic Population (3)
This course teaches recognition, evaluation, management, and treatment of non-orthopedic medical conditions that affect physically active populations.
Prerequisite: ATH503

ATH506 Therapeutic Interventions I (4)
Theories, concepts and psychomotor skills in the appropriate application and utilization of therapeutic exercise in the rehabilitation of musculoskeletal injuries.
Prerequisite: ATH503

ATH507 Therapeutic Interventions II (4)
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.
Prerequisite: ATH506

ATH508 Pharmacology in Athletic Training (2)
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.
Prerequisite: ATH505

ATH509 Research Seminar I (1)
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.

ATH510 Research Seminar II (1)
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.

ATH511 Research Seminar III (1)
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)
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. Additional Fee(s): Course fee

ATH513 Clinical Experience in Athletic Training II (3)
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. Additional Fee(s): Course fee

ATH514 Clinical Experience in Athletic Training III (2)
This course is designed to 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. Additional Fee(s): Course fee

ATH515 Clinical Experience in Athletic Training IV (4)
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 fully immersive clinical education experience approximately 320 hours. Additional Fee(s): Course fee

ATH516 Clinical Experience in Athletic Training V (3)
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. Additional Fee(s): Course fee

ATH517 Administration and Management (3)
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)
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)
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)
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)
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)
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.

ATH683 Special Topics
Special topics

BIO: BIOLOGY

BIO114 Basic Nutrition (3)
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.

BIO115 Basic Microbiology with Lab (4)
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. Additional Fee(s): Laboratory fee.

BIO116 Basic Anatomy and Physiology I with Lab (4)
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. Additional Fee(s): Laboratory fee.

BIO117 Basic Anatomy and Physiology II with lab (4)
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. Additional Fee(s): Laboratory fee.
Prerequisite: BIO116

BIO119 Medical Terminology (3)
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.

BIO129 Our Fragile Earth: A Scientific Perspective (3)
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, and problem-based activities to increase knowledge about environmental problems as well as increase scientific knowledge and literacy.

BIO129L Our Fragile Earth Lab (1)
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.

BIO135 Applied Human Biology (3)
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.

BIO135L Applied Human Biology Lab (1)
Laboratory course emphasizing aspects of human biology. Experiments will correlate with and enhance lectures in BIO 135. Add Additional Fee(s): Laboratory fees.

BIO143 The Cell (3)
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 lecture per week.

BIO143L Lab: The Cell (1)
Students participate in discovery-focused undergraduate research based on the SEA-PHAGES curriculum involving virus discovery and microbiological techniques. Three hours of lab per week. Additional Fee(s): Laboratory fees.

BIO144 The Organism (3)
This course provides a general survey of the diversity in each domain of life and their characteristics, with emphasis on their evolution and various physiological processes such as respiration, circulation, digestion, and reproduction. This course serves as a foundation for all upper-level biology courses. Additional Fee(s): Laboratory fees.

BIO144L Lab: The Organism (1)
Students will complete bioinformatics component of SEA-PHAGES discovery-based undergraduate research experience as well as experiments and activities to complement BIO144. Three hours of lab per week. Additional Fee(s): Laboratory fee.
Corequisite: BIO144

BIO201 Anatomy (3)
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.
*Prerequisites: BIO143 **and** BIO144*

BIO201L Lab: Anatomy (2)
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. Labs provide hands-on experience corresponding with lectures.
Prerequisite: BIO201

BIO205 Human Cadaver Dissection (3)
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. Add Additional Fee(s): Laboratory fees.
*Prerequisites: BIO201 **and** BIO201L*

BIO209 Basic Neuroscience (3)
The structure and function of the brain, spinal cord, and peripheral nerves are examined at the molecular, cellular, organismal, and social scales. The basics of movement, sensation, language, emotion, and cognition are discussed, with introductions to neural networks, neuropathology, and neuropharmacology.
Prerequisite: BIO143

BIO209LW Basic Neuroscience Lab (2)
Experiments and skills to complement the material presented in BIO209. The lab course focuses on active learning, experimental procedures, data analysis, and scientific writing. Additional Fee(s): Laboratory fee.
Corequisite: BIO209
Prerequisite: IND200W

BIO213 Special Topics (3)
Special topics.

BIO217 Human Genetics (3)
This foundational course covers Mendelian genetics and exceptions to Mendel's laws, chromosomal basis for inheritance, control of gene expression, mutation, population genetics, and evolutionary genetics. Advanced topics include epigenetics, medical genetics, biotechnology, and introduction to genomics.
*Prerequisites: BIO143 **and** BIO144*

BIO218 Women's Health Issues (3)
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.

BIO231 Cell and Molecular Biology (3)
The course covers basic structures, macromolecules, and biochemical processes of eukaryotic and prokaryotic cells. Topics include DNA replication, transcription, protein synthesis and folding, bioenergetics and enzymes, the regulation of gene expression, the cell cycle, and cancer.
*Prerequisites: BIO143 **and** CHM108*

BIO255 Biomedical Ethics (3)
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.

BIO302 Physiology (3)
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.
*Prerequisites: BIO143 **and** BIO144*

BIO302L Physiology Lab (2)
Laboratory experiments emphasizing the physiology of various body systems in humans. Additional Fee(s): Laboratory fee
Corequisite: BIO302

BIO303 Applied and Environmental Microbiology (3)
This course will focus on the importance of microorganisms in environmental and industrial processes and applications. Areas that will be covered include basic microbiology, soil and water microbiology, agricultural and food microbiology, and public health microbiology. Students strongly encouraged to enroll in BIO303LW.

BIO303LW Applied and Environmental Microbiology Lab (2)
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. Additional Fee(s): Laboratory fee.
Corequisite: BIO303

BIO319 Experimental Neuroscience (3)
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.
*Prerequisites: BIO209 **and** BIO231*

BIO321 General Microbiology (3)
The study of fundamental characteristics of bacteria, archaea, viruses, and eukaryotic microorganisms, including taxonomy, physiology, genetics, genomics, ecology, and distribution. Students are strongly encouraged to co-enroll in BIO321L.
*Prerequisites: BIO217 **and** CHM108*

BIO321L General Microbiology Lab (2)
Experiments to complement the material in BIO221. Additional Fee(s): Laboratory fees.
Corequisite: BIO321

BIO408 Developmental Biology (3)
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.
Prerequisite: BIO231

BIO417 Genetics (3)
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.
*Prerequisites: CHM205 **and** MTH110*

BIO419 Immunology (3)
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: BIO302 **or** BIO321*

BIO423 Neurobiology of Mental Health (3)
The course explores advanced topics in neurodevelopment, neurotransmission, neuroplasticity, and cognition through the lens of mental health, using neurological diseases such as depression and schizophrenia, as examples of pathophysiological processes underlying mental illness. Neurobiological mechanisms, clinical presentation, and therapeutic interventions will be discussed, with emphasis on neuropharmacology and mental health.
Prerequisits: BIO209

BIO458 Histology (3)
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.
*Prerequisite: BIO201 **or** BIO231*

BIO487 Neuropathology (3)
The course explores advanced topics in neurotransmission, plasticity, motor control, emotion, and cognition through the lens of neuropathologies, such as stroke, seizure, TBI, multiple sclerosis, and neurodegenerative diseases like Alzheimer's. Neurobiological mechanisms of disease cause and progression, clinical presentation of symptoms, and therapeutic approaches, including pharmacology, will be discussed.
Prerequisite: BIO209

BIO490 Integrative Capstone (3)
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.
Prerequisite: IND350W

BIO491 Independent Study (1)
Prerequisite: Permission of Instructor

BIO492 Independent Study (2)
Prerequisite: Permission of Instructor

BIO493 Independent Study (3)
Prerequisite: Permission of Instructor

BIO494 Independent Study (4)
Prerequisite: Permission of Instructor

BIO503 Human Anatomy (3)
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 lecture and two hours of laboratory per week.

BIO503L Laboratory: Human Anatomy (1)
Additional Fee(s): Laboratory fee.

BIO508 Developmental Biology (3)
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.

BIO509 Fundamentals of Neuroscience (3)
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.

BIO509L Fundamentals of Neuroscience Lab (1)
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. Additional Fee(s): Laboratory Fee.

BIO512 Advanced Human Gross Anatomy (3)
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.

BIO512L Advanced Human Gross Anatomy Lab (2)
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. Additional Fee(s): Laboratory Fee.
Corequisite: BIO512

BIO514 Advanced Human Physiology (3)
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.

BIO515 Portfolio Development for Professional Schools (1)
The course prepares students for the medical, dental, and veterinary school application process. Topics include the professional application process, personal

statement development, letters of recommendation, experience description construction, and interview skills. General standardized test (MCAT, GRE, DAT) preparation is included with a focus on critical analysis and reasoning skills.

BIO516 Advanced Neuroscience (3)
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.

BIO516L Advanced Neuroscience Lab (2)
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.
Additional Fee(s): Laboratory Fee.
Corequisite: BIO516

BIO517 Genetics (3)
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.

BIO519 Immunology (3)
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.

BIO523 Neurobiology of Mental Health (3)
The course explores advanced topics in neurodevelopment, neurotransmission, neuroplasticity, and cognition through the lens of mental health, using neurological diseases such as depression and schizophrenia, as examples of pathophysiological processes underlying mental illness. Neurobiological mechanisms, clinical presentation, and therapeutic interventions will be discussed, with emphasis on neuropharmacology and mental health.
Prerequisite: BIO516

BIO532 Biostatistics (3)
This course teaches students how to develop and present research proposals, perform thorough literature reviews, outline research budgets, and grasp wider research implications. Students will also learn how to design hypothesisdriven experiments with suitable controls, improving their proficiency in experimental design.

BIO538 Biochemistry I (3)
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)
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.

BIO553 Special Topics in Biology (3)
Lectures and/or laboratories in selected areas of contemporary biology, with a focus of recent research. Additional Fee(s): Laboratory Fee.

BIO555 Medical and Bio-ethics (3)
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 (3)
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.

BIO561 Pharmacology (3)
This course covers the general principles of drug action, including administration, distribution, metabolism, 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 antimicrobial and anti-cancer agents will be covered.

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.

BIO587 Neuropathology (3)
The course explores advanced topics in neurotransmission, plasticity, motor control, emotion, and cognition through the lens of neuropathologies, such as stroke, seizure, TBI, multiple sclerosis, and neurodegenerative diseases like Alzheimer's. Neurobiological mechanisms of disease cause and progression, clinical presentation of symptoms, and therapeutic approaches, including pharmacology, will be discussed.
Prerequisite: BIO516

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. Additional Fee(s): Laboratory Fee.
*Prerequisites: BIO512 **and** BIO512L*

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 graduate student in the biological sciences.

BIO637 Internship (1)

BIO638 Internship (2)

BIO639 Internship (3)

BIO650 Research Proposal (1)
This course teaches students how to develop and present research proposals, perform thorough literature reviews, outline research budgets, and grasp wider research implications. Students will also learn how to design hypothesis-driven experiments with suitable controls, improving their proficiency in experimental design.
Prerequisite: BIO630

BIO691 Independent Study (1)
Prerequisite: Permission of Instructor

BIO692 Independent Study (2)
Prerequisite: Permission of Instructor

BIO693 Independent Study (3)
Prerequisite: Permission of Instructor

BIO697 Scientific Dissemination (3)
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.
Prerequisite: BIO693

BIO698 Biology Thesis I (3)
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.
Prerequisite: BIO650

BIO699 Biology Thesis II (3)
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.
Prerequisite: BIO698

BIO800 Graduate Continuing Credit (1)

BUA, BUS: BUSINESS

BUA565 Storytelling with Data (3)
This course empowers MBA students to transform raw data into compelling narratives that drive business decisions. Students create data queries, conduct modeling and analytical exercises, extract strategic insights, and effectively communicate findings with data visualizations to boost the organization's competitive advantage and innovative capacity.
Prerequisite: BUS577

BUA595 Spreadsheet Modeling for Decision-Making (3)
Spreadsheet tools are the most universally recognized and accessible method relied upon by business analysts. Students learn data preparation and cleaning, operational and financial modeling, and forecast optimization using PivotTables and PivotCharts. Learning outcomes include complex dataset analysis and effective communication of insights to support managerial decision-making.
Prerequisite: BUS577

BUA635 Python for Business Analytics (3)
This course addresses Python's significance in business analytics, how to set up the Python environment, and learn its basic syntax. Students apply Python's three essential libraries of functionality to solve complex business problems: NumPy for numerical data, Pandas for data manipulation, and Matplotlib for data visualization.
Prerequisite: BUS577

BUA685 Managing AI Projects (3)
AI projects can help predict trends and optimize operations, allowing managers to understand, predict, and recommend action. This course prepares students to drive financial and operational impact by managing AI project lifecycles, developing comprehensive project plans, managing data and models, ensuring effective deployment, and communicating progress and outcomes to stakeholders.
Prerequisite: BUS577

BUS101 Business Professionalism (1)
In today's evolving business landscape, projecting a professional image is a necessity. This comprehensive course equips students with the knowledge, tools and mindset to navigate the interpersonal complexities of the corporate world with confidence and finesse. These skills pave the way toward achieving both personal and career ambitions.

BUS105 Foundations of Business (3)
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 Analytics I (3)
This course introduces analytical tools that are essential for deriving actionable data-driven solutions to real world business problems. Modules address descriptive statistics, inferential analysis, hypotheses testing, results interpretation, and

presentation of key findings. Students utilize diverse sources of data from business cases, research studies, open access datasets, and secondary reports.
Prerequisite: BUS105

BUS145 Sustainability in Action (3)
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.

BUS210 US Labor Relations, Labor Policy and Worker Rights (3)
This course will provide an overview of labor and employment relations, including the US labor market and labor policy, perspective of working people, worker rights, and relevant organizations and institutions. We will also study the changing nature of work and the factors of such a change.

BUS213 Special Topics (3)
Special topics.

BUS217 Introduction to Project Management (2)
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) examination.

BUS220 Excel for Professionals (3)
This comprehensive Excel course covers essential functions, data analysis, and visualization techniques to enhance productivity. Students learn to create spreadsheets, utilize formulas, and generate reports. The course concludes with a brief introduction to QuickBooks, equipping learners with foundational skills for effective financial management with Excel integration.

BUS230W Organizational Behavior (3)
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.
Prerequisite: BUS105

BUS240 International Business (3)
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.

BUS243 Principles of Marketing (3)
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.

BUS244 Consumer Behavior (3)
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.
Prerequisite: BUS243

BUS257 Business Law and Business Ethics (3)
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.

BUS272 Principles of Finance (3)
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.
Prerequisite: ACT222

BUS301 Introduction to Continuous Improvement Methodologies (3)
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.
*Prerequisite: BUS110 **or** MTH110*

BUS310W Business Analytics II (3)
This course builds upon the student's foundational knowledge of business research and analytics. Students practice a disciplined approach to assessing real-world business problems and applying descriptive, predictive, and prescriptive techniques to solve them. Course activities include discussion forums, case studies, experiential projects, and constructive assessment.
*Prerequisite: BUS110, MTH110, **or** PSY213*

BUS312 Marketing Research (3)
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.
Prerequisite: BUS243

BUS317 Systems Analysis and Design (3)
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).
Prerequisite: CMP283

BUS319 Professional Selling (3)
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.
*Prerequisites: BUS105 **and** BUS243*

BUS350 Advertising and Promotion (3)
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.
Prerequisite: BUS243W

BUS357 Strategy and Entrepreneurial Ventures (3)
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.

BUS390 Human Resources Management (3)
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)
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.
Prerequisite: BUS105

BUS413 Operations (3)
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.
*Prerequisite: BUS110, MTH110, **or** PSY213*

BUS421 Information and Cybersecurity (3)
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.
Prerequisite: CMP283

BUS445 Marketing Strategy (3)
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.
Prerequisits: BUS243

BUS450 Advanced Database (3)
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.
Prerequisite: CMP283

BUS452 Managing Nonprofit Organizations (3)
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.
*Prerequisites: BUS105 **or** both SWK101 **and** SWK102*

BUS462 Global Procurement (3)
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.
Prerequisite: BUS105

BUS490 Integrative Capstone (3)
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.
Prerequisite: BUS310W

BUS493 Independent Study (3)
Prerequisite: Permission of Instructor

BUS496 Digital Marketing (3)
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. *Prerequisite: BUS243*

BUS510 Health Communications (3)
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)
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)
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 (3)
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.

BUS551 Informatics in Healthcare (3)
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.

BUS552 Managing Non-Profit Organizations (3)
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)
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)
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.

BUS575 Leading Organizations and Projects (3)
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.

BUS576 Sustainable Human Capital (3)
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 Business Analytics (3)
This course explores the strategic transformation of raw data into information and intelligence. Students learn to source and integrate datasets, apply analytical methods, and communicate insights from modeled findings. Enterprise resource planning (ERP), customer relationship management (CRM), data warehouses, and Big Data are critically examined through cases and hands-on projects.

BUS582 Foundations of Project Management (3)
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.

BUS623 Strategic Performance for Executives (3)
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.

BUS639 Sustainability and Assessment Reporting (3)
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)
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.

BUS643 International Field Experience (3)
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, BUS643 is highly recommended. Additional Fee(s): Travel fee.

BUS652 Managerial Accounting (3)
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.

BUS671 Global Marketing (3)
This course examines global marketing challenges and opportunities, highlighting international markets, cultural differences, and strategic frameworks. Topics include consumer behavior, branding, advertising, pricing, packaging, and global brand management. Using case studies, lectures, and projects, students will develop skills to create strategic marketing plans for diverse global brands.

BUS672 Corporate Finance and Governance (3)
This course focuses on financial-analytical tools and methods for making effective business and policy decisions. Topics include setting financial health benchmarks, assessing financial performance, interpreting financial data and making informed recommendations that protect the interests of all stakeholders. The principles of good corporate governance provide assurance of long-term business viability.

BUS680 Complex Issues in Project Management (3)
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.
Prerequisite: BUS582

BUS698 Strategy for Business Resilience (3)
Students examine strategic frameworks and methods for gaining competitive advantage. Innovation and growth opportunities are assessed relative to internal and external business conditions. Case analyses, experiential projects, and class discussion address the strategic planning process, its application across industries and global contexts, and its role in assuring business resilience.
Prerequisite: BUS671

BUS699 MBA Summit (1)
This course is the culminating experience in the MBA program. In teams and individually, students apply the knowledge and insights gained in the MBA program

to case analysis. Activities align with the student's program concentration to maximize the value and relevance of their academic journey.
*Prerequisites: BUS672 **and** BUS698*

CHM: CHEMISTRY

CHM102 Energy and the Environment (3)
Lecture course that utilizes the principles of chemistry to explore selected topics, including climate change, environmental pollution, alternative energy, commercial products, drugs, and nutrition. The course is not open to majors in chemistry, biology, or neuroscience.

CHM102L Energy and the Environment Lab (1)
One semester laboratory course to accompany CHM102 Energy and the Environment. Two hours of lab per week. Not open to majors in biology or chemistry. Additional Fee(s): Laboratory Fee.

CHM107 Chemistry I (3)
This course is the first course in a two-semester sequence designed to provide a robust foundation in the principles of chemistry. Topics include atomic and electronic structure, periodicity, nomenclature, dimensional analysis, reaction stoichiometry, molecular shapes, bonding, intermolecular forces, gases, solids, liquids, and solutions.

CHM108 Chemistry II (3)
This course is the second course in a two-semester sequence designed to provide a robust foundation in the principles of chemistry. Topics include thermochemistry, phase changes, chemical equilibrium, acids and bases, reactions in aqueous solution, thermodynamics, kinetics, and electrochemistry.
Prerequisite: CHM107

CHM109L Chemistry I Laboratory (1)
Introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with the lectures in Chemistry 107. Additional Fee(s): Laboratory fee.
Corequisite: CHM107

CHM110L Chemistry II Laboratory (1)
Continued introduction to the basic experimental procedures and laboratory techniques in chemistry. Experiments are correlated with lectures in CHM108. Additional Fee(s): Laboratory fee.
Prerequisite: CHM109L
Corequisite: CHM108

CHM205 Organic Chemistry I (3)
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.
Prerequisite: CHM108

CHM206 Organic Chemistry II (3)
Discussion of organic functional groups and their chemistry. Spectroscopy, mechanisms, and synthetic type-reactions are included. A discussion of biologically important compounds is also covered.
Prerequisite: CHM205

CHM209 Inorganic Chemistry (3)
A descriptive survey of inorganic chemistry, including bonding theories, coordination compounds, electrochemistry, inorganic syntheses, and the chemistry of the transition metals.
Prerequisite: CHM108

CHM215L Elementary Organic Laboratory (2)
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.
Corequisite: CHM205

CHM216LW Organic Chemistry Laboratory (2)
Chemistry of organic functional groups. Identification of unknowns and a multistep synthesis. Four hours of laboratory per week. Additional Fee(s): Laboratory fee.
*Prerequisites: CHM215L **and** IND200W*

CHM311 Physical Chemistry I (3)
Introduction to thermodynamic aspects of physical chemistry, and a survey of kinetics. Chemical reactions and other transformations are examined in light of ideas of energy conservation and the direction of spontaneous change. Molecular, mathematical, and statistical-mechanical underpinnings are emphasized as appropriate.
*Prerequisites: CHM205 **and** MTH151*

CHM312 Physical Chemistry II (4)
Quantum mechanics, spectroscopy, introduction to symmetry, and introduction to statistical mechanics.
*Prerequisites: CHM206, CHM311, MTH152 **and** PHY252*

CHM317L Integrated Chemistry Laboratory (2)
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. Additional Fee(s): Laboratory fee.
Prerequisite: CHM110L
Corequisite: CHM311

CHM318L Chemical Analysis Laboratory (3)
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.
Prerequisite: CHM216L

CHM322 Topics in Analytical Chemistry (3)
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.
Corequisite: CHM318L
Prerequisits: CHM206

CHM338 Biochemistry I (3)
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.
Prerequisite: CHM205

CHM339 Biochemistry II (3)
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. Cross-listed as BIO438
*Prerequisites: CHM206 **and** CHM338*

CHM340L Macromolecule Laboratory (2)
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. Additional Fee(s): Laboratory fee.
Corequisite: CHM338

CHM340LW Macromolecule Laboratory (2)
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. Additional Fee(s): Laboratory fee.

CHM343 Environmental Chemistry (3)
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.
Prerequisite: CHM205

CHM345 Modeling Earth's Climate
Quantitative modeling of Earth's climate, focusing on energy and carbon flows on a global scale. Students interpret Global Climate Models and write original computer code to create their own climate model. The consequences and mitigation of anthropogenic global warming are emphasized. Programming skills are taught from the ground up.
Prerequisite: CHM108

CHM490 Integrative Capstone (3)
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.
Prerequisite: IND350W

CHM491 Independent Study (1)
Prerequisite: Permission of Instructor

CHM492 Independent Study (2)
Prerequisite: Permission of Instructor

CHM493 Independent Study (3)
Prerequisite: Permission of Instructor

CHM494 Independent Study (4)
Prerequisite: Permission of Instructor

CMP: COMPUTING

CMP120 Introduction to Programming (3)
An introduction to the theory and practice of computer programming with an emphasis on problem solving. No previous programming experience is required.

CMP213 Special Topics (3)
Special topics.

CMP220 Computer Programming II (3)
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.
Prerequisite: CMP120

CMP283 Database Management Systems (3)
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.
Prerequisite: CMP120

COM: COMMUNICATION

COM101 Introduction to Communication Theory (3)
This course introduces students to theories in the field of communication. Students will survey the seven traditions of communication, covering classical topics as rhetoric, modern examinations of language with semiotics, and postmodern analyses of critical theory. The course will cover contemporary research to discuss paradigms, methods, and theories.

COM106 Media and Society (3)
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.

COM209 Intercultural Communication (3)
The course introduces students to theories of culture and identity. Students will examine how culture and identity give people their sense of self. Students will also examine contemporary approaches to gender, race, and sexuality in international contexts. The course includes a term-long project emphasizing empirical research.

COM213 Special Topics in Communications (3)
Special topics.

COM223W Qualitative Research Methods (3)
Qualitative Research Methods refer to a collection of approaches focused on understanding the ways people experience their worlds. There is an emphasis on multiplicity that attempts to comprehend and represent the diversity of the human experience. Such approaches utilize interpretation as a form of analysis situated in the narrative paradigm.

COM234W Persuasion (3)
This course introduces students to socio-psychological theories that measure and quantify communication. Students will focus on attitudes, behaviors, and values to identify cause-and-effect relationships. As a writing-intensive course, students will develop a term-long project that demonstrates interaction and influence.

COM251 News Writing and Editing (3)
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.

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.
*Prerequisite: COM251 **or** COM255*

COM260W Practical Public Relations (3)
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.

COM264 Strategic Communication Agency (3)
This course is designed to introduce students to the interdisciplinary departments that make up a strategic communication agency by completing client-focused projects. The course will explore the role of strategic communication in the nonprofit sector vs. corporate sector and connect students with projects that align with Chatham's mission and values.

COM310W Environmental Communication (3)
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.
*Prerequisites: COM106 **and** COM141*

COM313 Special Topics (3)

COM314 Careers in Strategic Communication (3)
This PRO course is designed to give students hands-on training in skills and organizational processes that make up an integrated communication agency and business strategies involved in managing and promoting an agency. Students will complete client-focused projects related to public relations, marketing, design, and social/digital media and develop professional portfolios.

COM351 Advanced News Writing and Editing (3)
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.
Prerequisite: COM251

COM355 Organizational Communication (3)
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.

COM360 Advanced Public Relations (3)
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.
Prerequisite: COM260W

COM374 Documentary and Photojournalism (3)
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 art fee
*Prerequisite: ART152S **or** FDT150S*

COM490 Integrative Capstone (3)
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.
Prerequisite: FDT300W

COM492 Independent Study (2)
Prerequisite: Permission of Instructor

COM493 Independent Study (3)
Prerequisite: Permission of Instructor

CRM: CRIMINOLOGY

CRM101 Introduction to Criminal Justice (3)
This course is an introduction to the 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.

CRM224 Juvenile Justice (3)
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 SWK224.

CRM225W Criminology (3)
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.
Prerequisite: CRM101

CRM305 Law Enforcement and Criminal Investigations (3)
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.
Prerequisite: CRM101

CRM310 Survey of Corrections (3)
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.
Prerequisite: CRM101

CRM313 Special Topics (3)
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.
Prerequisite: CRM101

CRM320 Criminalization of Mental Illness (3)
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.
*Prerequisite: CRM101, PSY101, **or** SWK101*

CRM332 History of Crime and Punishment (3)
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.
Prerequisite: CRM101

CRM340 Violent and Predatory Crimes (3)
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.
Prerequisite: CRM101

CRM362 What is Evil? (3)
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."
*Prerequisite: CRM101 **or** PSY101*

CRM490 Integrative Capstone (3)
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.
*Prerequisites: PSY213 **and** PSY314W*

CRM491 Independent Study (1)
Prerequisite: Permission of Instructor

CRM492 Independent Study (2)
Prerequisite: Permission of Instructor

CRM493 Independent Study (3)
Prerequisite: Permission of Instructor

CSA: CHATHAM STUDY ABROAD

CSA210 Chatham Abroad: Asia (3)
Prerequisite: Permission of Instructor

CSA230 Chatham Abroad: Europe (3)
Prerequisite: Permission of Instructor

CSA311 Chatham Abroad: Asia (3)
Prerequisite: Permission of Instructor

CSA331 Chatham Abroad: Europe (3)

CSA341 Chatham Abroad: North America (3)

CST: CULTURAL STUDIES

CST120 Introduction to Jewish Studies (3)
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.

CST183 Representations of Race and Gender (3)
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.

CST204W East Asian Studies (3)
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 the Pittsburgh area.

CST213 Special Topics (3)
Special topics.

CST215 Perspectives in Queer Theory (3)
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.
Prerequisite: ENG105

CST235 East Asian Cinema (3)
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.

CST342 Post/Modern China: Digital Storytelling (3)
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.
Prerequisite: ENG105

CST351 Asian Pacific Islander America: History and Culture (3)
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.
Prerequisite: ENG105

CST490 Integrative Capstone (3)
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.
Prerequisite: ENG350W

DAN: DANCE

DAN101 Dance History: Embodying the Past (3)
This course offers a dynamic exploration of dance history through practical application. Students will learn about pivotal moments, influential figures, and diverse styles in dance while actively engaging in movement. By embodying historical dance forms and creating their own interpretations, students will gain a deeper, experiential understanding of dance's evolution.

DAN121 Contemporary Dance Technique I (3)
Students will explore movement patterns of dance within the contemporary, lyrical genre. Choreography will be taught each week, and foundational elements of ballet, spine articulation, body isolations, and floor work will be incorporated within the daily class lessons. Students will be challenged physically and artistically in this high-impact class.

DAN125 Folk and Ethnic Dance (3)
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 Rhythms Beyond Borders (3)
This course explores the fundamental techniques and principles of a chosen non-Western dance form, examining its influence on contemporary dance. Students engage in expressive movement, rhythmic exploration, and cultural attire. Through workshops, students delve into the dance's ceremonial significance, rituals, historical context, and cultural importance in its society of origin.

DAN213 Special Topics (3)
Special topics.

DAN239 Dance Performance (3)
This course will examine fundamental elements of dance performance. Movement patterns, choreographic phrasing, and musicality will be explored to heighten the dancer's ability to stylize movement and enhance dance technique. This active, dynamic dance class will study applications across various dance genres in rehearsal and performance settings.

DAN305 Choreography (3)
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.

DAN313 Special Topics (3)
Special topics.

DAN493 Independent Study (3)
Prerequisite: Permission of Instructor

DSA: DATA SCIENCE ANALYTICS

DSA200 Data Science Ethics (3)
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.

DSA250 Fundamentals of Data Science (3)
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.
*Prerequisites: CMP120 **and** MTH110*

DSA400W Data Visualization and Communication (3)
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.
Prerequisite: DSA250

DSA411 Machine Learning and AI (3)
An introduction to machine learning and artificial intelligence. Topics include classification, regression, clustering, planning, and scheduling. Includes current issues relevant to big data problems.
Prerequisite: DSA250

DSA490 Integrative Capstone (3)
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.
*Prerequisites: BUS310W **and** DSA250*

DSA493 Independent Study (3)
Prerequisite: Permission of Instructor

ECN: ECONOMICS

ECN101 Principles of Macroeconomics (3)
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.

ECN102 Principles of Microeconomics (3)
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.

ECN262 Global Environmental Economics (3)
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. This course fulfills an environmental general education mission course requirement.
Prerequisite: ECN102

ECN330 Global Financial System and the Macro Economy (3)
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.
*Prerequisites: ECN101 **and** ECN102*

ECN331 Managerial Economics (3)
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.
Prerequisite: ECN102

ECN351 International Trade and Finance (3)
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.
*Prerequisite: ECN101 **or** ECN102*

ECN355 Economic Analysis of Public Policy (3)
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.
Prerequisite: ECN102

ECN358W Economic Development (3)
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.
*Prerequisite: ECN101 **or** ECN102*

ECN410 Econometrics (3)
Econometrics is a subset of economics, applying statistics and mathematical techniques to "justify" a theoretical economic model with empirical rigor. ECN410 introduces students to multiple regression methods for analyzing data in economics and related disciplines.
*Prerequisite: BUS110, MTH110 **or** PSY213*

ECN490 Integrative Capstone (3)
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.
Prerequisite: BUS310W

EDC, EDS, EDU: EDUCATION

EDC107 Field Placement I (1)
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.
Corequisite: EDC105

EDC200 Field Placement: Learning Theory (1)
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.

EDC250 Field Placement III (1)
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.

EDC350 Field Placement V: Instructional Strategies II (1)
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.
*Corequisite: EDC319 **and** EDU335*

EDS210 Collaboration Consultation and Teamwork (3)
This course is to prepare special educators to connect and interact with other professionals and families as co-educators. Students will explore theories of interrelationships within the school context as related to special education services, and how to complete information for the IEP.
Prerequisite: EDU234

EDS320 Early Intervention Birth Through K (3)
This course introduces the candidate to methods of service delivery for children with disabilities and families from birth through school-age. Key aspects of collaboration,

interdisciplinary collaboration, service coordination and culturally responsive family-entered practices are explored. Field work is required.
Prerequisite: EDU234

EDS361 Instructing Students with High Incidence Disabilities (3)
This course provides an advanced application of research-based interventions for individuals with high incidence disabilities. Topics include 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 early intervention methods.
Prerequisite: EDU234

EDS362 Instructing Students with Low Incidence Disabilities (3)
This course focuses on the design of a comprehensive educational program for students with low incidence disabilities. 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.
Prerequisite: EDU234

EDS405 Instructing Students with Autism (3)
This course covers topics that concern students with autism. This course provides an overview of evidence-based instructional strategies used to teach students with autism, as well as ways to collaborate with individuals in the home, school and community. Topics cover specific instruction strategies, family/community relations, behaviors, inclusion and transition.
Prerequisite: EDU234

EDS464 Behavior and Social Intervention and Support (3)
Students investigate the principals and systematic approaches used to identify and analyze problem management techniques, individual behavior, social, and affective intervention strategies, and community-based support programs designed to address problem behavior. Positive Behavior Supports, functional behavior assessment, crisis intervention and conflict resolution are explored as strategies for confronting challenging behaviors
Prerequisite: EDU234

EDS490 Practicum in Special Education (3)
This course focuses on observation and demonstration of teaching and participation in seminars that discuss the current issues in transition and special education. Students refine and increase their sophistication of teaching competencies with a qualified special educator in a school setting for a minimum of 100 hours.
*Prerequisites: EDS361 **and** EDS362*

EDU104 Perspectives on Education (3)
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.

EDU105 Child Development: Birth Through Grade 4 (3)
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.

EDU108 Play and Movement (1)
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.

EDU205 ELL Teaching Strategies for Classroom Teachers (3)
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.

EDU207 Trends and Issues in Early Childhood Education (3)
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.

EDU214 Special Topics (3)

EDU219W Cognitive Learning Theories (3)
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.

EDU227 Literacy (3)
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.

EDU230 Mathematical Foundations (3)
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.

EDU234 Inclusion: Issues and Strategies (3)
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)
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)
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.

EDU301 Eden Hall Experience: Experiential Learning and (1)
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.

EDU319 Methods of Teaching Elementary Social Studies (3)
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.

EDU323 Educational Research Methods (3)
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.

EDU323W Educational Research Methods (3)
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.

EDU328 Literacy II: Connections to Literature (3)
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.

EDU335 Methods of Teaching Elementary Mathematics (3)
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.

EDU336 Methods of Teaching Elementary Science (3)
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.

EDU340 Education for Sustainability (3)
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.
Prerequisite: EDU104

EDU360 Trauma Informed Approaches to Educational Settings (3)
This course will provide educators with understandings of Adverse Childhood Experiences (ACEs), Trauma, and Mental Illness. Students will explore the impact of these experiences on development and learn about social-emotional learning (SEL). Practical skills such as recognizing signs of distress, de-escalation techniques, and suicide prevention activities will also be covered.

EDU380 Advocacy, Collaboration, and Teamwork for SEL
This course focuses on developing collaboration skills with community members to provide realistic and integrated programs around social and emotional learning 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 in educational settings.

EDU400 Data Driven Instruction Decisions (2)
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)
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)
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.

EDU415 Secondary School Curriculum (3)
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.
Prerequisite: EDU104

EDU416 Methods of Teaching Secondary English (3)
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 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

EDU417 Methods of Teaching Secondary Social Studies (3)
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.
Prerequisite: EDU104

EDU418 Methods of Teaching Secondary Science (3)
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.
Prerequisite: EDU104

EDU419 Methods of Teaching Secondary Mathematics (3)
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.
Prerequisite: EDU104

EDU420 Using a Multi-Tier System of Support to Promote Social Emotional Learning (3)
This course describes the Multi-Tier System of Support (MTSS) framework and its use for promoting social, emotional, and behavioral wellness in schools. MTSS and the relationship between diagnosis, disability and Positive Behavior Intervention and Supports will also be discussed.

EDU422 Pre-Student Teaching (3)
In this one-day week field experience, the pre-service teacher gains experiences that will allow them to practice, develop, and demonstrate Pennsylvania Department of Education Stage Three competencies through meaningful and collaborative school-university partnership with a local district. An approved application to Pre-Student Teaching is required.
Prerequisite: EDU241

EDU423 Student Teaching (9)

EDU430 Diverse Family and Community Partnerships (3)
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)
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.

EDU432 Human Geography (3)
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.

EDU437 Methods of Teaching Elementary Art (3)
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

EDU447 Methods of Teaching Secondary Art (3)
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
Prerequisite: EDU104

EDU448 Teaching the Holocaust (3)
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.
Prerequisite: HIS224

EDU460 Non-Licensure Practicum in Education (9)
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.
Prerequisite: EDU104

EDU480 Social-Emotional Learning Practicum (3)
This practicum provides interns experience in promoting SEL and focuses on understanding the importance of SEL, implementing evidence-based strategies, and fostering a positive classroom climate. Interns will apply their knowledge in real-world settings and reflect on experiences to enhance professional practice. Students will spend 70 hours at a placement site.
Prerequisite: EDU360

EDU490 Integrative Capstone (3)
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.
Prerequisite: EDU323W

EDU492 Independent Study (2)
Prerequisite: Permission of Instructor

EDU493 Independent Study (3)
Prerequisite: Permission of Instructor

EDU498 Tutorial: Education (4)

EDU499 Tutorial: Education (4)

EDU502 Perspectives on Education (2)
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.
Corequisite: EDU580

EDU503 Young Adolescent Literature (2)
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.

EDU505 Issues of Poverty in Education (3)
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.

EDU508 Games Children Play (1)
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.

EDU509 Trends and Issues in Early Childhood Education (3)
Trends and Issues in Early Childhood Education

EDU510 Differentiated Reading and Writing (3)
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.

EDU511 Early Elementary Curriculum (3)
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.
*Corequisites: EDU607 **and** EDU609*
Prerequisite: EDU502

EDU513 Education for Sustainability (1)
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.

EDU514 Data Driven Instructional Decisions (2)
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 an 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)
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)
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.
*Corequisites: EDU515 **and** EDU581*

EDU517 Teaching Methods in Secondary Social Studies (3)
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
*Corequisites: EDU515 **and** EDU581*

EDU518 Methods of Teaching Secondary Science (3)
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.
*Corequisites: EDU515 **and** EDU581*
*Prerequisites: EDU515 **and** EDU581*

EDU524 Teaching in a Urban Schools (2)
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.
Prerequisite: EDU502

EDU526 Integrated Humanities Methods (2)
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 contact area literacy is required.
Prerequisite: EDU502

EDU528 Integrated Math and Science Methods (2)
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.

EDU530 Diverse Family and Community Partnerships (3)
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)
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.

EDU534 Methods of Teaching Elementary Social Studies (2)
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.

EDU535 Methods of Teaching Elementary Mathematics (3)
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.
Prerequisites: EDU502 ***and*** *EDU607*

EDU536 Methods of Teaching Elementary Science (2)
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.
Prerequisite: EDU502

EDU537 Methods of Teaching Elementary Art (3)
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)
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.
Prerequisite: EDU502

EDU580 Supervised Field III Experience (0)
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.

EDU581 Pedagogical Practices (1)
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.

EDU583 Conflict Resolution (1)
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.

EDU591 Independent Study (1)
Prerequisite: Permission of Instructor

EDU592 Independent Study (2)
Prerequisite: Permission of Instructor

EDU593 Independent Study (3)
Prerequisite: Permission of Instructor

EDU605 Instructing Students With Autism Spectrum Disorders (3)
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.

EDU606 Adolescent Development and Learning Theory (3)
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.

EDU607 Child Development and Learning Theory (3)
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.

EDU609 Literacy (3)
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.

EDU618 Instructional Computer Integration (2)
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.
Prerequisite: EDU502

EDU629 School Law (3)
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.

EDU634 Inclusion: Issues and Strategies (3)
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.

EDU639 Integrating the Arts (3)
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.

EDU657 ELL Teaching Strategies for Classroom Teachers (3)
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.

EDU661 High Incidence Disabilities: Instructional Strategies Birth-Grade 8 (3)
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.
Prerequisite: EDU506

EDU662 Advanced Instructional Interventions 7-12 (3)
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.
Prerequisite: EDU510

EDU664 Behavior Management in the Classroom (3)
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.

EDU668 Low Incidence Disabilities: Birth-8th Grade (3)
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.

EDU669 Low Incidence Disabilities 7-12 (3)
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.

EDU671 Collaboration, Consultation, and Teamwork (3)
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.

EDU673 Instructional Personalization and Transition (2)
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.

EDU690 Practicum in Special Education (6)
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.
*Prerequisites: EDU524, EDU668, **and** EDU673*

EDU694 Student Teaching for the Urban Fellow (3)
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.

EDU696 Student Teaching (9)
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.

ELI, ELP: ENGLISH LANGUAGE INSTRUCTION

ELI031 Basic Reading (3)

ELI032 Basic Grammar (3)

ELI033 Basic Listening/Speaking (3)

ELI034 Basic Writing (3)
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'.

ELI071 Focus on Listening/Speaking (3)

ELI073 Focus on Reading (3)

ELI075 Focus on Writing (3)

ELI077 Focus on Grammar (2)

ELI081 Listening/Speaking I (3)
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.

ELI082 Speaking/Listening II (3)

ELI083 Grammar I (3)
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.

ELI084 Grammar II (3)
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.

ELI085 Reading I (3)
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 (3)

ELI087 Writing I (3)
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.

ELI088 Writing II (3)

ELI090 American Culture and Cinema (3)

ELI091 US Culture I (3)

ELI092 Communication for Success (3)

ELI094 Writing for Success (3)

ELI101 Academic Reading (3)
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.

ELI102 Academic Writing (3)
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.

ELI104 Academic Composition (3)

ELI106 Classroom Interaction (3)
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.

ELI107 Advanced College Readings (3)

ELI108 Academic Communication Skills (3)

ELI193 US Culture - Pittsburgh (3)

ELI501 Graduate Academic Discourse (3)

ELI503 Graduate Writing (3)

ELP011 Basic Listening/Speaking A (2)
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 their background, immediate environment, and matters in areas of immediate need.

ELP012 Basic Reading A (2)
This basic level reading course continues to develop students' abilities to read simple texts on a variety of familiar topics.

ELP013 Basic Writing A (2)
This basic level writing course aims to develop the students' abilities to write comprehensible sentences on familiar topics.

ELP014 Basic Grammar A (1)
This basic level grammar course provides explicit instruction and practice of basic grammatical elements and structures including nouns and adverbs, tenses, and time and reason clauses.

ELP016 Basic Listening and Speaking B (2)
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 their background, immediate environment, and matters in areas of immediate need.

ELP017 Basic Reading B (2)
This basic level reading course continues to develop students' abilities to read simple texts on a variety of familiar topics.

ELP018 Basic Writing B (2)
This basic level writing course aims to develop students' abilities to write comprehensible sentences on familiar topics.

ELP019 Basic Grammar B (1)
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.

ELP031 Low Intermediate Listening and Speaking A (2)
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 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.

ELP037 Low Intermediate Reading B (2)
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.

ELP038 Low Intermediate Writing B (2)
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.

ELP039 Low Intermediate Grammar B (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.

ELP051 Intermediate Listening and Speaking A (2)
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, coherence, and clarity of speech.

ELP052 Intermediate Reading A (2)
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.

ELP053 Intermediate Writing A (2)
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.

ELP054 Intermediate Grammar A (1)
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.

ELP056 Intermediate Listening and Speaking B (2)
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, coherence, and clarity of speech.

ELP057 Intermediate Reading B (2)
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.

ELP058 Intermediate Writing B (2)
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.

ELP071 High Intermediate Listening/Speaking A (2)
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.

ELP072 US Culture (2)
This course introduces students to various topics related to US culture, values, traditions, and ways of life through readings, discussion, and reflection on experiences.

ELP073 High Intermediate Writing A (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.

ELP074 High Intermediate 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 Intermediate 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 Intermediate 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 Intermediate Grammar B (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.

ELP103 Advanced Grammar (3)
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.

ELP122 American Literature (3)
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.

ENG: ENGLISH

ENG100 Introduction to Literary Studies (3)
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.

ENG102 Expository Writing (3)
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 to three times with the permission of the English program.

ENG105 First-Year Writing (3)
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 OAAR. Students with transfer credits may meet the requirement for ENG105 with the transfer of a college-level composition course or AP/IB credit.

ENG200 *Frankenstein:* Creation of Culture (3)
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.

ENG201 Environmental Literature and Film (3)
This course 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.

ENG204 World Literature (3)
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.
*Prerequisite: ENG100 **or** ENG105*

ENG207 British Writers I (3)
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.
*Prerequisite: ENG100 **or** ENG105*

ENG208 British Writers II (3)
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.

ENG209 Linguistics (3)
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 analysis. Fulfills secondary English education certification requirement; recommended also for any student considering graduate study in English.

ENG213 Special Topics (3)
Special topic

ENG216W American Writers I (3)
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.
*Prerequisite: ENG100 **or** ENG105*

ENG217W American Writers II (3)
A continuation of English 216, with emphasis on such figures as Whitman, Dickinson, Twain, Henry James, Faulkner, and Sylvia Plath.
*Prerequisite: ENG100 **or** ENG105*

ENG220 Gender and Sexuality in Speculative Fiction (3)
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.

ENG234 Literary Publishing (3)
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.

ENG241 Writing for Professionals (3)
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.

ENG242 Introduction to Creative Writing (3)
This course introduces students to the distinguishing features and traditional elements of poetry, fiction, and nonfiction. Students read classic and contemporary works in each of these genres, while attending to how a text engages with literary traditions. Readings in genre theory will accompany each unit of the course.

ENG243 Creative Writing I (3)
This course focuses on the vocabulary of craft and literary devices through reading and writing poetry, fiction, and nonfiction. Students develop creative writing skills through responses to challenging prompts and sharing their work in progress through workshop and performance.

ENG244 Creative Writing II (3)
This course leads students to define their individual writing styles and goals through critical reading and self-reflexive study of craft. Students develop writing skills through responses to challenging prompts and present a selection of their work each week for class discussion.

ENG245 Advanced Writing Workshop (3)
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.
*Prerequisites: ENG243 **and** ENG244*

ENG262 Introduction to Women Writers (3)
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.

ENG282 20th-Century African-American Literature (3)
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.

ENG283 The Harlem Renaissance (3)
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.

ENG287 African-American Writers (3)
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.
*Prerequisite: ENG100 **or** ENG105*

ENG302 Environmental Children's Fiction and Film (3)
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.
Prerequisite: ENG105

ENG303 Food and American Identity (3)
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.
*Prerequisite: ENG100 **or** ENG105*

ENG310 Summer Community of Writers (3)
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. Additional Fee(s), Course fee
*Prerequisites: ENG242, ENG243, ENG244, **and** ENG245*

ENG313 Special Topics (3)
Special topics

ENG321W Shakespeare Survey (3)
A representative study of Shakespeare's comedies, histories, and tragedies as literary, dramatic, and Elizabethan art.
*Prerequisite: ENG207, ENG216, **or** ENG216W*

ENG350W Seminar in Literary Theory and Scholarly Writing (3)
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.
Prerequisite: ENG100

ENG355 Advanced Writing and Stylistics (3)
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 Prose (3)
This is a practical application course for experienced writers specializing in fiction and nonfiction prose. Reading and writing will center on the craft of narrative and tools for creating character and persona, scene, sense of place, summary, dialogue, framing, flashbacks, and transitions, as well as oral presentation and publication.
Prerequisites: ENG100

ENG366 Writing Nonfiction (3)
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.
*Prerequisites: ENG100 **and** ENG242*

ENG367 Multi-Genre Writing (3)
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.
*Prerequisites: ENG100 **and** ENG242*

ENG368 Writing Poetry (3)
This is a practical application course for experienced writers specializing in poetry. Reading and writing will center on the craft of poetry and poetic tools including figures of speech, meter, music and rhythmic devices in traditional and experimental forms, and oral performance and publication of poetry.

ENG385 Toni Morrison Seminar (3)
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.
Prerequisite: ENG105

ENG413 Special Topics (3)
Special topics

ENG419 Frontier Women (3)
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.

ENG425 Bleak Houses: Shifting Landscapes of the English Novel (3)
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.

ENG429 The Literary Cookbook (3)
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.

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 the different uses of the term, its scope, and its limitations.

ENG490 Integrative Capstone (3)
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.
Prerequisite: ENG350W

ENG491 Independent Study (1)
Prerequisite: Permission of Instructor

ENG493 Independent Study (3)
Prerequisite: Permission of Instructor

ENG512 Teaching Creative Writing in Alternative Spaces (3)
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.

ENG513 Writing About Food (3)
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.

ENG515 Teaching Writing (3)
Students will explore the genres of creative and academic writing from the perspective of a teacher, producing lesson plans and developing a final curricular design for a creative or academic writing 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.

ENG528 Academic Writing (3)
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.

ENG529 The Art of Compression (3)
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.

ENG531 Readings in Contemporary Lyricism (3)
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)
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)
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.
Prerequisite: ENG523

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.
Prerequisite: ENG523

ENG539 Writing Creative Nonfiction: Memoir (3)
A creative Non-Fiction workshop focusing mainly on the memoir.
Prerequisite: ENG523

ENG545 Writing Creative Nonfiction: Literary Journalism (3)
A creative non-fiction workshop focusing on literary journalism.
Prerequisite: ENG523

ENG548 Writing Creative Nonfiction (3)
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.
Prerequisite: ENG523

ENG549 Exiles (3)
This course examines 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).

ENG551 Writing Fiction: The Short Story (3)
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.
Prerequisite: ENG523

ENG553 Writing Poetry (3)
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.
Prerequisite: ENG523

ENG554 Writing Fiction (3)
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.
*Prerequisite: ENG523, ENG581, **or** ENG582*

ENG557 Writing Fiction: Story Collections/Novel-in-Stories (3)
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.
*Prerequisite: ENG523 **or** ENG581*

ENG567 Long Projects (3)
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.
*Prerequisite: ENG523, ENG581, ENG582, **or** ENG583*

ENG569 The Fourth River Practicum (3)
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.

ENG572 The Literature of Social Engagement (3)
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.

ENG580 August Wilson and Pittsburgh (3)
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.

ENG581 The Craft of Fiction (3)
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)
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)
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.

ENG584 The Environmental Imagination (3)
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)
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.

ENG589 Creative Writing: Multi-Genre (3)
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. *Prerequisite: ENG523*

ENG595 Independent Literary Publishing (3)
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.

ENG600 Foundations of Creative Writing (3)
This 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 (3)
This 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.

ENG605 Prose Thesis Seminar (3)
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)
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)
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.

ENG621 Advanced Literary Analysis I (3)
This 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.

ENG622 Advanced Creative Writing I (3)
This 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.

ENG623 Advanced Literary Analysis II (3)
This 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.

ENG624 Advanced Creative Writing II (3)
This 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. .

ENG660 Thesis Writing Mentorship (3)
This 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.

ENG676 Artists in the Community (3)
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.

ENG678 Field Placement (3)
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 (3)
Special topics

ENG691 Independent Study (1)
Prerequisite: Permission of Instructor

ENG692 Independent Study (2)
Prerequisite: Permission of Instructor

ENG693 Independent Study (3)
Prerequisite: Permission of Instructor

ENG694 Internship (3)
Internship with a publishing company, literary press or other writing organization.

ENG698 Final Manuscript (3)
Independent work on the final creative thesis and critical introduction. Taken in the last year of the MFA.
*Prerequisite: ENG605, ENG606, ENG607, ENG608, **or** ENG609*

ENG709 Summer Community of Writers (3)
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.

ENG710I Summer Community of Writers – Part One (6)
Summer community of writers.

ENG710II Summer Community of Writers – Part Two (6)
Summer community of writers.

ENG800 Graduate Continuing Credit (1)

ENV: ENVIRONMENTAL STUDIES

ENV203 Dynamic Earth Systems (3)
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.

ENV204 Botany (3)
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 fro humans is discussed, including their use for food and medicine. Three hours of lecture per week.
*Prerequisite: BIO144 **or** SUS201*

ENV204L Lab: Botany (2)
Experiments to complement the material presented in BIO224. Four hours of laboratory or field experience per week. Additional Fee(s): Laboratory fees.
Corequisite: BIO224

ENV208 Backpacking: Experiencing the Natural History of Western (3)
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.

ENV247 Environmental Geology (3)
Fundamental earth science concepts are used to assess the impact of global climate change, human demographics, and human development on the Earth's natural resources. Course will also examine how natural processes interact with human activities.

ENV247L Environmental Geology Lab (1)
Laboratory and field exercises will help students understand the fundamental earth science processes linked with global climate change and with human use of the

Earth's natural resources. Two hours of laboratory per week. Additional Fee(s): Laboratory fee.

ENV248 Ecology (3)
A study of the interrelation between organisms and their environment. Three hours of lecture per week.
*Prerequisites: BIO143 **and** one of the following: BIO144 **or** SUS201*

ENV248LW Lab: Ecology (2)
Experiments to complement the material presented in BIO248. Four hours of laboratory or field experience per week. Additional Fee (s): Laboratory fee.
Corequisite: ENV248

ENV250 Plants, People, and the Environment (3)
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.
Prerequisite: BIO129

ENV260 Physical Geology (3)
Physical geology introduces students to Earth's rocks and minerals, their origin, and the processes that continue to shape them. Students will gain a deep understanding of plate tectonics and surficial processes. Reading and interpreting topographic and geologic maps and using geologic field mapping techniques enhance visualization of processes and outcomes.
Prerequisite: CHM108

ENV260L Physical Geology Lab (1)
Laboratory skills to complement the material presented in ENV260. Additional Fee(s): Laboratory fee.
Prerequsite: CHM110L
Corequisite: ENV260

ENV303 Global Change Science (3)
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.
Prerequisite: ENV203

ENV313 Special Topics (3)
Special topics.

ENV315 Conservation Science (3)
Conservation science focuses on the causes and consequences of loss of biodiversity and habitat, and how practitioners mitigate these impacts. Students will investigate the importance of and disruptions to biodiversity, as well as tools and techniques available to conserve biological diversity in a human-dominated world facing climatic change.
*Prerequisites: SUS201 **and** ENV203*

ENV327W Writing about Environmental Science (3)
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.
*Prerequisite: ENV247, ENV303 **or** FST320*

ENV360 Field Ornithology (3)
Field Ornithology focuses on identification and ecology of local birds, and on a variety of field study techniques for conducting ornithology and related studies. The instructors will use observational field trips, field laboratory exercises, lectures, and readings to introduce students to the study of wild birds in the field.

ENV404 Quantitative Ecology (3)
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.

ENV404L Quantitative Ecology Laboratory (1)
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 Fee(s): Laboratory fee.
Corequisites: ENV404

ENV428 Environmental Hydrology (3)
Hydrology explores how freshwater moves throughout Earth, from the atmosphere to groundwater and as surface water in streams. Students will be introduced to scientific concepts required to manage freshwater as a natural resource using a systems approach to water budgeting. The course emphasizes mathematical modeling and managing water resources.
*Prerequisites: MTH110 **and** ENV203*

ENV451 Soil Science (3)
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. Additional Fee(s): Course Fee.
Prerequisite: CHM107

ENV461 Aquatic Entomology (3)
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.
*Prerequisite: BIO144 **or** SUS201*

ENV461L Aquatic Entomology Lab (1)
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.

ENV471 Conservation in Practice (3)
Conservation theory lives in its practice. Students will work collaboratively with community conservation partners on real-world projects, including through on-site visits. This approach not only develops students' problem solving, communication, and critical thinking skills; it also fosters connections with conservation practitioners and enhances professional development.
Prerequisite: ENV315

ENV484 Plant Physiology (3)
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.
*Prerequisite: ENV224 **or** CHM108*

ENV484L Lab: Plant Physiology (2)
Experiments to complement the material presented in BIO384. Four hours of laboratory per week. Additional Fee(s): Laboratory fees.
Corequisite: ENV484

ENV490 Integrative Capstone (3)
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.
Prerequisite: ENV327W

ENV491 Independent Study (1)
Prerequisite: Permission of Instructor

ENV492 Independent Study (2)
Prerequisite: Permission of Instructor

ENV493 Independent Study (3)
Prerequisite: Permission of Instructor

EXS: EXERCISE SCIENCE

EXS101 Introduction to Exercise Science (1)
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.

EXS102 First Aid and Cardiopulmonary Resuscitation (1)
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. Additional Fee(s): Laboratory fees.

EXS103 Wellness (2)
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. 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.

EXS104 Introduction to Careers in Athletic Training (1)
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. Additional Fee(s): Laboratory fees.

EXS105 Personal Nutrition (1)
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.

EXS106 Movement for Life (1)
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.

EXS123 Nutrition (3)
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.

EXS201W Introduction to Critical Research Appraisal (2)
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.
Prerequisite: EXS101

EXS202 Exercise and the Environment (3)
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.
*Prerequisite: EXS101, EXS102, **or** EXS103*

EXS233 Functional Anatomy (3)
This course explores the relationship between the musculoskeletal and neuromuscular systems through the study of the structural and functional components that produce human movement. Students will acquire foundational skills in surface anatomy, identification and palpations, goniometry, manual muscle and neurological testing.
Prerequisite: BIO117

EXS252W Exercise and Nutrition (3)
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.

EXS275 Measurement and Evaluation in Human Performance (3)
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. Additional Fee(s): Course fee.
Prerequisite: EXS101

EXS302 Principles of Strength and Conditioning (3)
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.
*Prerequisite: BIO116 **or** BIO201*

EXS302L Principles of Strength and Conditioning Lab (1)
This lab accompanies EXS302 and focuses on applying theory and methods associated with maximal strength, power, and anaerobic capacity development. Students will apply theoretical knowledge of physiology and biomechanics to develop strength and conditioning training programs to improve strength and power, aerobic endurance, speed, and change of direction. Additional Fee(s): Laboratory fee.
Corequisite: EXS302

EXS303 Skeletal Muscle Biochemistry (3)
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.
*Prerequisite: BIO116 **or** BIO201*

EXS313 Nutrition Across the Lifespan (3)
This course provides students with an in-depth understanding of the nutritional requirements for humans during all stages of the life cycle. Particular attention is given to how nutrition impacts normal development, health, and disease in pregnancy, infancy, childhood, adolescence, and early and late adulthood.
*Prerequisites: CHM109L **and** EXS105*

EXS314 Community Nutrition (3)
This course will examine the role and impact of nutrition in promoting, improving and maintaining health in the community. Aspects of the emerging health delivery system, and entrepreneurial ventures will be discussed. Focus is placed on the financial, legislative, political, sociological, and scientific aspects of public and community health nutrition.
*Prerequisites: CHM109L **and** EXS105*

EXS321 Prevention and Care of Athletic Injuries (3)
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. Additional Fee(s): Course fee.
*Prerequisite: BIO116 **or** BIO201*

EXS326 Applied Exercise Physiology I (3)
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.
*Prerequisite: BIO116 **or** BIO201*

EXS326L Lab: Applied Exercise Physiology I (1)
Experiments to complement the material presented in EXS326. Two hours of laboratory per week. Additional fee(s): Laboratory fee.
Corequisite: EXS326

EXS345 Kinesiology and Movement Science (3)
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.
*Prerequisite: BIO116 **or** BIO201*

EXS345LW Lab: Kinesiology and Movement Science (1)
Experiments to complement the material presented in EXS345. Lab will include activities related to skill acquisition, performance and biomechanical analysis of functional motor patterns. Three hours of laboratory per week. Additional fee(s): Laboratory fee.
Corequisite: EXS345

EXS360 Exercise and Aging (3)
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.
*Prerequisite: BIO116 **or** BIO201*

EXS385 Pathophysiology (3)
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.
*Prerequisite: BIO117 **or** BIO302*

EXS410 Professional Experience in Exercise Science (1)
The professional experience in exercise science provides students with hands-on learning opportunities to apply and demonstrate the skills gained from exercise science coursework. Students will perform exercise testing and prescription in active populations. Additional Fee(s): Course fee.
*Prerequisite: EXS 302, EXS 326 **and** 326L*

EXS413 Nutrition Planning (3)
This course aims to integrate students' understanding of nutrition and development of individualized nutrition recommendations for a variety of populations including adult, athletic, and special populations (i.e. pediatric, geriatric, and obese).
This course will emphasize how an individual's demographics, medical history, socioeconomic status, etc. can impact nutritional status.
Prerequisite: EXS313

EXS414 Sports Nutrition (3)
This course discusses scientifically founded sports nutrition, including macronutrients, energy expenditure in sports, and exercise. Focus on dietary requirements pre-activity, during, and post-activity, ergogenic aids, and nutritional supplements in sports. Diets and their implications/impact on the body will also be discussed along with diverse and special populations.

EXS425 Exercise Science Certification Preparation (3)
Students will learn practical application and real-world administration of comprehensive strength and conditioning programming in preparation for the

National Strength and Conditioning Association CSCS and CPT examinations. Topics include FMS, SFMA, YBT assessments, testing, evaluation, exercise techniques, program design, anaerobic training and aerobic endurance training. Additional fee(s): Course fee.
*Prerequisite: BIO117 **or** BIO201*

EXS426 Applied Exercise Physiology II (3)
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.
*Prerequisites: EXS326 **and** EXS326L*

EXS426L Applied Exercise Physiology II Lab (1)
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. Additional fee(s): Laboratory fee.
Corequisite: EXS426

EXS430 Group Exercise Leadership (3)
This course prepares students to serve as exercise leaders in a group setting for participants across the age spectrum and of diverse physical abilities. Topics covered will include foundational components and best practices in group exercise leadership, and cardiorespiratory, muscular, flexibility and functional training.
Prerequisite: EXS101

EXS450 Exercise Prescription for Special Populations (2)
This course provides students with the knowledge needed for comprehensive exercise programming in special populations. Physiological differences across special populations and the impact of the differences on exercise testing and prescription will be discussed. Special populations will include children, older adults, pregnant women, and those suffering from chronic health conditions.
Prerequisite: EXS326

EXS490 Integrative Capstone (3)
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.
Prerequisite: EXS301W

EXS491 Independent Study (1)

EXS492 Independent Study (2)

EXS493 Independent Study (3)
Prerequisite: Permission of Instructor

INTEXS303 Internship: Exercise Science (3)
*Preequisites: EXS303 **and** EXS326*

FDT: FILM AND DIGITAL TECHNOLOGY

FDT150S Introduction to Digital Video Production (3)
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.

FDT160 World Film History (3)
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.

FDT161 Introduction to Film, Video and New Media Art (3)
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.

FDT200 Final Cut Pro X (3)
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.

FDT210 Studio: Adobe Illustrator (1)
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.

FDT213 Special Topics (3)

FDT220 Studio: Adobe Photoshop (1)
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.

FDT225 Female Narration: Race and Gender in Women's Films (3)
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.

FDT230 Studio: Adobe InDesign (1)
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.

FDT267S Intro to Podcasting (3)
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.

FDT300 Critical Theory (3)
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.

FDT300W Critical Theory (3)
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.

FDT313 Special Topics (3)

FDT331 The Craft of Screenwriting (3)
This course 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/scripts that illustrate a deep understanding of the literary tools available to filmmakers and screenwriters in this genre.

FDT350S Intermediate Digital Video Production Studio (3)
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.
Prerequisite: FDT150S

FDT421S Digital Animation and Compositing (3)
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.
Prerequisite: FDT150S

FDT450S Advanced Digital Video Production Studio (3)
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.
Prerequisite: FDT350S

FDT469S Advanced Visual Effects (3)
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.
Prerequisite: FDT421

FDT490 Integrative Capstone (3)
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.
Prerequisite: FDT300W

FDT491 Independent Study (1)
Prerequisite: Permission of Instructor

FDT493 Independent Study (3)
Prerequisite: Permission of Instructor

FDT500 Lab: Final Cut Pro X (2)
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. Additional Fee(s): Course Computing LAB Fee.

FDT510 Lab: Adobe Illustrator (1)
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 ab will cover one of the essential design applications: Adobe Illustrator on the Macintosh platform.

FDT520 Lab: Adobe Photoshop (1)
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.

FDT530 InDesign Lab (1)
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

FDT543 The Media Production Industry (3)
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.

FDT550 Media Project I: Digital Video Production (3)
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)
Provides overview for incoming graduate students of current rhetorical concerns related to independent media, film production, and histories.

FDT571 e-Merging Media I (3)
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

FDT613 Special Topics (3)

FDT641 The Craft of Screenwriting (3)
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.

FDT650 Media Project II: Advanced Digital Video Production (3)
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)
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)
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.

FDT667 Advanced Sound Design and Audio Post Production (3)
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.
Prerequisite: FDT675

FDT671 Emerging Media II: Advanced Web Design (3)
Focuses on the technical through advanced study. Students will produce DVD, CD-ROM, and other interactive projects. Additional Fees: Course Computing Fee

FDT675 Media Project III: Advanced Sound Production (3)
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)
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

FDT677 Media Project V (6)
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

FDT683 Internship (3)

FDT692 Independent Study (2)
Prerequisite: Permission of Instructor

FDT693 Independent Study (3)
Prerequisite: Permission of Instructor

FDT698 Portfolio (3)
The MA Portfolio is the final requirement for the MA degree.The Portfolio project must demonatrate the student's aesthetic, conceptual, and technical skills along with a strong personal artistic voice from the intial concept to the completed 15 minute short film. Additional fee(s): Applied laboratory fee
*Prerequisites: FDT550 **and** FDT650*

FDT699 MFA Thesis (6)
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.
*Prerequisites: FDT663 **and** FDT698*

FDT800 Graduate Continuing Credit (1)

FIN: FINANCE

FIN674 Capital Markets and Investing (3)
This course teaches students how to manage risk while building and protecting wealth. Topics include the historical performance of broad classes of financial assets, bond valuation, the principles of Modern Portfolio Theory, methods for determining the cost of debt and equity, and the use of financial options reduce risk.
Prerequisite: BUS672

FIN676 Financial Statement Analysis and Valuation (3)
Financial statements reveal a company's financial health and potential for future profitability. In this course, students learn to make informed investment decisions using techniques in financial statement analysis, financial ratio analysis, risk assessment, pro forma financial statements, and advances valuation techniques like DCF and comparable company analysis.
Prerequisite: BUS672

FIN678 Frontiers of Finance (3)
Finance is an evolving filed, with disruptors like blockchain and cryptocurrency allowing investors to capitalize on more opportunities than ever before. Students learn to describe and evaluate blockchain, analyze cryptocurrencies, and assess decentralized finance (DeFi) platforms. Blockchain and crypto career opportunities are explored.
Prerequisite: BUS672

FST: FOOD STUDIES

FST150 Food, Farm & Field (3)
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. Additional Fee(s): Course fee.

FST205 Food Science Principles and Practice (3)
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. Additional Fee(s): Course fee.

FST213 Special Topics (3)

FST215W Global Foodways (3)
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.

FST234 Food Cultures of Asian Diasporas (3)
This course provides an overview of Asian and South Asian agriculture and culinary cultures as both settled and diasporic. Course uses sociopolitical understanding of food culture and production, representation and community, with a focus on historical transformations of food culture in response to migration and globalization in North America.

FST250 International Cuisine (3)
This course explores international cuisine and culture using an interdisciplinary lens, combing field experience from farm to kitchen to expand knowledge of global culture and cuisine. Readings range in topics from history, sociology, cookbooks to anthropology, journalism and popular culture. Assignments address cuisine, culture and communication, culinary history and identity. Additional Fee(s): Course fee.

FST302 Nutrition and Community (3)
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.

FST307W Community and Food (3)
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. Additional Fee(s): Course fee.

FST310 Futures in Food Systems (1)
This is a one credit professional development process that prepares students for their internship and provides insights into future careers. Emphasis is on project planning, individual skills assessment, professionalization and communication.

FST315 Food Access and Policy (3)
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.

FST316 Writing About Food, Farm, and Field (3)
This course provides training and practice in the craft of writing about food, farm, and field, focusing on how we sustain ourselves correlative to the non-human "natural" world. Students will develop a portfolio of essays in different genres based on experiences and observation. Field experiences are required.

FST320 Basic Agroecology (3)
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. Additional Fee(s): Course fee.

FST320L Growing Sustainably Lab (1)
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. Additional Fee(s): Course fee.

FST322 Coops, Markets, Food Systems (3)
This course introduces cooperatives and other collaborative and alternative business models in market-oriented societies. Exploration of collaborative structures focuses on food and agriculture but is relevant to all sustainability focused businesses. Case studies and local examples provide the context to explore fundamentals of operations governance, financing, and policy.

FST323 Communicating Food Systems (3)
Students will explore vital issues in food, agricultural, and environmental sciences and will develop and practice methods to critically evaluate, effectively communicate, and influence decisions about these issues. They will engage with issue stakeholders and investigate the impacts that varying perceptions have on the food system, the environment, and society.

FST342 Sustainable Production (3)
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. Additional Fee(s): Course fee.

FST345 Applied Agricultural Experience 1 (3)
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. *Prerequisite: FST320*

FST345L Applied Agricultural Experience Lab 1 (2)
Course focuses on repeated practice and skill development with specific modes of agricultural production, as complement to 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. Additional Fee(s): Course fee. *Prerequisite: FST320*

FST365 Coffee: History, Politics, Practices (3)
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.

FST370 Applied Culinary Experience 1 (3)
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.
Prerequisite: FST205

FST370L Applied Culinary Experience Lab 1 (2)
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.
Prerequisite: FST205

FST402 Global Agriculture (3)
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.

FST417 Safe Practices in Food and Agriculture (1)
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. Additional fee(s): Course fee.

FST428 Tree Care (3)
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.

FST446 Applied Agricultural Experience II (3)
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.
Prerequisite: FST320

FST446L Applied Agricultural Experience II Lab (2)
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. Additional fee(s): Course fee.
Prerequisite: FST320

FST471 Applied Culinary Experience 2 (3)
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. Additional fee(s): Course fee.
Prerequisite: FST205

FST471L Applied Culinary Experience Lab 2 (2)
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.
Prerequisite: FST205

FST490 Integrative Capstone (3)
The capstone in food studies is an independent project on a food studies topic that culminates in a summary paper and public presentation. The focus is directed and supported study using methods of inquiry or research, peer feedback on process, and communication of the results through a scholarly or applied product.

FST491 Independent Studies (1)

FST492 Independent Studies (2)

FST493 Independent Studies (3)

FST502 Essential Readings in Food and Agriculture (0.5)
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)
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.

FST505 Food and Representations (3)
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.

FST508 Food Systems (3)
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)
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?

FST510 Food, Culture, History (3)
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.

FST511 Research Methods (3)
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.

FST512 Practical Nutrition (3)
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.

FST514 Wine, Ciders and Meads (3)
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. Additional fee(s): Course fee.

FST515 Writing About Food (3)
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.

FST516 Sustainable Culinary Basics (3)
The fundamental concepts, skills and techniques involved in classical cookery are covered in this course. Special emphasis is given to the study of ingredients, flavor profiles, cooking theories and menu development. The course will be comprised of lecture, demonstrations, hands on culinary production and tastings.

FST517 Writing About Food II (3)
This workshop-based course focuses on strengthening and refining writing skills for the long form essay. Students dig into the style and craft of creative nonfiction food essays via reading, generative writing exercises, revision, and refinement,

incorporating research and interview content. Includes workshopping practice and the goal of a publishable essay.
Prerequisite: FST515

FST518 Business of Food and Agriculture (3)
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.

FST520FE Basic Agroecology (3)
This course focuses on the application of agroecological principles to sustainable agriculture at Eden Hall and other farms, integrating best practices through field experiences related to soil fertility, biodiversity, organic standards, and growing techniques. Engagement in agricultural projects and practices is linked to theory, politics, and history of different approaches. Additional Fee(s): Course fee.

FST520L Growing Sustainably Lab (1)
This course comprises the experiential lab component of the Growing Sustainably 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. Additional Fee(s): Course fee.

FST522 GIS: Food and Agriculture (3)
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. Additional Fee(s): Course fee.

FST524 Greenhouse Production (3)
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.
Prerequisite: FST520

FST527 Permaculture (3)
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.

FST528FE Tree Care (3)
This course examines the roles of trees in agroecosystems, including trees in orchards, farms, forests, and urban landscapes. We look at trees as organisms–understanding tree biology, learning to climb and prune trees–and also at trees as they function within systems including forest ecology, agroforestry, silvopasture, silviculture, and/or arboriculture. Additional Fee(s): Course fee.

FST530 Sustainable Gastronomy (3)
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. Additional Fee(s): Materials fee.

FST531 Sustainable Fermentation (3)
Fermentation is an incredible process by which microbes transform foods into more digestible, nutritious, and flavorful versions of themselves. Participants will learn the basic techniques for lacto-fermentation, as well as the process of using starter cultures and wild fermentation via lecture, research, tasting, demonstration, field work and experiential learning. Additional Fee(s): Materials fee.

FST532FE Sustainable Meat Production (3)
As part of agricultural and culinary knowledge, understanding meat production is a critical skill for work across the food system. In this comprehensive overview we will examine meat's many historical, cultural, economic, ecological, and ethical dimensions, and engage with animal agriculture and meat processing both in and outside the classroom. Additional Fee(s): Course fee.

FST534 Learning Through Food (3)
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 theories and associated instructional philosophies to help students develop their identities as food educators. Additional Fee(s): Course fee.

FST550 Sustainable Nonprofit Management (3)
Using reading, independent research, and class discussion, this course provides an overview of the history and role of nonprofit and nongovernmental organizations in our communities, country, and world. Students will acquire skills in project design and management, policy and procedure making, grant writing, fundraising, monitoring and evaluation, and budget management.

FST591 Independent Study (1)
Prerequisite: Permission of Instructor

FST592 Independent Study (2)
Prerequisite: Permission of Instructor

FST593 Independent Study (3)
Prerequisite: Permission of Instructor

FST600 Qualitative Interviewing (3)
This course is a practicum designed to allow students intensive experience in a variety of qualitative interviewing techniques, including oral history, semi-structured, and informal approaches. Students will conduct interviews and explore technique, theory, and function for different modes

FST602 Global Agriculture (3)
This course examines a range of agro-ecological, philosophical, socio-economic, and political issues related to international agriculture and food systems. It provides an introduction to tropical and/or temperate agriculture systems, exploring how choices of production and consumption impact the nature of food, agriculture, sustainability, and communities across locations and scales. Additional Fee(s): Travel fee.

FST603 Food Journeys (3)
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.

FST607 Sustainable Consumption (3)
Eating "sustainably" considers environmental health, local economies and social justice issues. The course explores three 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.

FST608 Culture and Culinary Grains (3)
This course explores grains as a mainstay of human consumption, including history, agriculture practices, varieties, and baking. Class utilizes the Eden Hall bread oven for practice baking with fire and regionally sourced grains. Focal topics include regional grains movements, wood-fired baking history, grain and crop varieties, and technical baking skills. Additional Fee(s): Course fee.

FST609 Dairy: From Pasture to Plate (3)
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. Additional Fee(s): Course fee.

FST613 Community Research: Food and Health (1)
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.

FST614 New Product Development (3)
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. Additional Fee(s): Course fee.

FST615 Food, Labor, and Inequality (3)
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.

FST616 Cultivating the Midwest: Corn and Soybeans (3)
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.

FST620 Research in Food and Agriculture (2)
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.

FST621 Applied Methods (1)
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.

FST622 Advanced New Product Development (3)
This course allows students to continue
process of new product development from ideation to market with an emphasis on consumer testing, packaging, and marketing.

FST623 Food Project Proposals (1)
This one credit course is an independent study practicum to support thesis and project proposal design for either the MA thesis in food studies or a project outside the scope of regular classroom activities. Focus is on crafting a proposal that meets standards for grants, academic research, and community projects.

FST624 Chocolate: Politics and Pleasure (3)
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. Additional Fee(s): Course fee.

FST625FE U.S. Agricultural Policy (3)
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. Additional Fee(s): Course fee

FST626 Food Project Manuscripts (1)
This independent study practicum supports Food Studies graduate students moving a project or thesis to a publishable or professionally accessible document as a thesis or project outside the scope of regular classroom activities. Focus is on crafting a manuscript that meets standards for grants, academic research, and community projects.

FST640 Sustainable Community Development (3)
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.

FST683 Special Topics (3)
Special topics.

FST690 Internship (0)

FST691 Internship (1)
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)
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)
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.

FST697 Thesis Practicum (1)
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.

FST698 Thesis/Project (3)
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.

FST800 Graduate Continuing Credit (1)

HCI: HEALTHCARE INFORMATICS

HCI502 Healthcare Delivery Systems (3)
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.

HCI503 Informatics Foundation and Health Care Technology (3)
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.

HCI504 Project Management (3)
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)
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.
Prerequisite: HCI651

HCI506 Health Policy and Informatics (3)
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.

HCI507 Informatics Immersion (3)
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.

HCI525 Advanced Analytics (3)
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".
Prerequisite: HCI505

HCI583 Virtual Engagement to Improve Health (3)
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.

HCI584 Telehealth I (3)
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.

HCI585 Telehealth II (3)
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.
Prerequisite: HCI584

HCI586 Cybersecurity (3)
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.

HCI631 Integrating Technology into a Healthcare Environment (3)
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.

HCI651 Database Management for Evidence-Based Decision Making (3)
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.

HCM: HEALTHCARE MANAGEMENT

HCM500 US Healthcare Sustem Economics (3)
Healthcare systems are complicated structures with many economic and legal dependencies. In this course, aspiring healthcare system managers analyze the economic impact of policy changes on their institutions and explore mission critical challenges such as hospital mergers, new payment models, regulated drug prices, and Medicaid insurance bids.
Prerequisite: BUS577

HCM550 Management of Healthcare Organizations (3)
This course focuses on the management principles and practices that create successful healthcare organizations. Students learn to navigate key management challenges, apply strategic analysis frameworks, and manage healthcare workforce and IT systems. Discussions emphasize ethical leadership, collaboration, and quality assurance.

HCM575 Data Analysis for Healthcare Management (3)
Healthcare data enables informed solutions, but also unique challenges. In this course, students explore effective management and integration of data-driven decisions in healthcare. Students gain experience with analytical tools and techniques to assess and communicate data insights aimed at improving healthcare system performance.
Prerequisite: BUS577

HCM600 Healthcare Finance (3)
Financial management acumen is crucial for quality patient care. This course covers financial statement analysis, cost accounting, capital budgeting, and financial modeling. These tools equip future healthcare managers to make informed decisions on important topics such as evaluating insurance designs, assessing service line impacts, and analyzing new drug costs.
Prerequisite: BUS72

HIS: HISTORY

HIS100 Introduction to World History (3)
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)
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.

HIS200W Revolutions in Latin America (3)
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)
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)
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."
Prerequisite: POL100

HIS204W East Asian Studies (3)
An exploration of East Asian geography, history, language, and culture frim 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)
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.

HIS213 Special Topics (3)

HIS215 Working Class Radicals (3)
This course examines working-class history in the United States with a special focus on working-class activists, organizers, and thinkers that were often labeled "radicals." It incorporates the diverse voices of the American working class, including activists inside and outside the labor movement.

HIS216 Rise of the Third World (3)
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.

HIS220 U.S. Women's History (3)
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.

HIS224 The Holocaust (3)
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.

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 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 History of Islam (3)
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.

HIS247 American Environmental History (3)
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.

HIS250 History of Christianity (3)
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.

HIS257 The Sixties, Vietnam & America (3)
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.
*Prerequisite: HIS100, HIS102, **or** IND108*

HIS258 History of Activism in Appalachia (3)
This course examines the history of social, economic, and political activism in Appalachia from the early 1900s to the present.

HIS263 Gender and the Family in America (3)
In every era of US history, family and gender have been subject to and shaped by other forced 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.
*Prerequisite: HIS100 **or** HIS102*

HIS270 U.S. and the Holocaust (3)
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.

HIS283 Religious Movements in the Global South (3)
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.

HIS284 African Americans, Civil War & Reconstruction (3)
This course examines the history of African Americans during the era of the Civil War and Reconstruction. The course will examine the experiences of enslaved people, abolitionists, soldiers, politicians, and sharecroppers as they struggled collectively and individually to achieve citizenship and civil rights.

HIS285 African-American History (3)
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.

HIS301 The Middle East and the United States (3)
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: Any 200-level history course **or** permission of the instructor.*

HIS307 Oral History, Neighborhoods, and Race (3)
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.

HIS309 Black Pittsburgh & Digital History (3)
This course examines current methods and technologies used in the production of digital history, with a particular focus on incorporating the history of Black Pittsburgh resources into on-line historical media.
Prerequisite: HIS102

HIS326 The Arab-Israeli Conflict (3)
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 serveral decades are considered, emphasizing the conflict between Palestinians and Israelis but also examining the role of regional and world powers.

HIS328 Recent African History and NGO Networks (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 being overlooked? The course tackles this question while offering opportunities to gain substantial, practical knowledge about contemporary Africa.

HIS342 Post/Modern China: Digital Storytelling (3)
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.
Prerequisite: ENG105

HIS351 Asian Pacific Islander America: History and Culture (3)
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.
Prerequisite: ENG105

HIS352 Asian Pacific Islander America: Field Experience (1)
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.

HIS360 History of Pan-Africanism (3)
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.

HIS490 Integrative Capstone (3)
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.
*Prerequisite: POL311 **or** POL311W*

HIS493 Independent Study (3)
Prerequisite: Permission of Instructor

HIS498 Tutorial: History (4)

HIS499 Tutorial: History (4)

HON: HONORS

HON100 Introduction to the Honors Program (1)
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.

HON200 Introduction to Research Methods (3)
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.

HON413 Special Topics in Honors: Leadership Survey (3)
Special topics

HSC: HEALTH SCIENCES

HSC100 Introduction to the Health Professions (1)
Introduction to the Health Professions explores a variety of health professions along with the roles and responsibilities of a 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.

HSC104 Introduction to Occupational Therapy (3)
This course will provide students with an overview of the field of occupational therapy. The course investigates occupational therapy's unique role across the lifespan, focusing on developmental tasks, populations, and example interventions within various practice settings. Hands-on experiences are utilized to enhance student learning and critical thinking skills.

HSC110 Foundations of Health and Wellness (3)
This course explores the fundamental principles of health and wellness, emphasizing the importance of establishing solid health foundations from early youth through maturity. It surveys personal health and health maintenance through various dimensions including physical activity, fitness, nutrition, social-emotional well-being, and the creation of healthy environments.

HSC201 Health Literacy: A Primer for Healthcare Professionals (1)
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.

HSC203 The Art of Caring (3)
This course will explore the art of caring in healthcare professions. Using theoretical frameworks as a base, the art of caring will be examined through various art forms. Students will create their own answer to the question "what does caring look like to you?"

HSC205 Emotional Competence (1)
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.

HSC210 Introduction to Climate Change and Health (1)
This one-credit course provides a basic understanding of climate change and its influence on human health in the 21st century.

HSC213 Special Topics (3)
Special topics

HSC220 Health Coaching (3)
This course is designed to provide students with knowledge and practical skills of health coaching. Topics include effective communication strategies, motivational interviewing, goal setting, health and lifestyle assessments, integrative approach to health coaching and health behavior change, and legal/ethical responsibilities of a health coach.

HSC240 Fundamentals of Global and Public Health (3)
Concepts of public health, contemporary global health challenges, health indicators, and healthcare access as human rights will be discussed in this course. Students will explore healthcare models and the major health issues facing societies and examine effective strategies and interventions that have been implemented nationally and internationally.

HSC301W Topics in Healthcare (3)
Topics in healthcare is designed to facilitate critical thinking around issues in healthcare. Key concepts such as evidence-based practice, knowledge translation, health quality and safety, healthcare ethics, and clinical reasoning will be threaded throughout.

HSC310 Health Determinants, Inequities, and Disparities (3)
This course provides an in-depth exploration of health equity and disparities in the US. Health determinants, historical issues, population-based data, and policies at national and local levels influencing public and global health and contributing factors to health inequities and strategies for addressing these will be explored.

HSC320 Disability and Society (3)
This course offers a comprehensive exploration of disability from a multidisciplinary perspective. Students will critically analyze the factors and systems that contribute to oppression, marginalization, and exclusion of people with disabilities. This course will foster an understanding of disability as a multifaceted experience and promote advocacy for inclusion and equity.

HSC330 Aging and Health (3)
This course explores aging from both physiological and sociological perspectives. It examines the implications of aging on personal lives, social structures, healthcare systems, and society as a whole. Students will gain an understanding of the complexities of aging and its impact on various facets of life.

HSC340 Principles of Interprofessional Healthcare (3)
This course covers fundamental concepts and core competencies of interprofessionalism in healthcare. It enhances understanding of various healthcare roles, emphasizing teamwork, ethics, and communication. Through case studies and real-world examples, students learn how interprofessional collaboration improves patient outcomes and fosters respect and shared decision-making.
Prerequisite: HSC100

HSC350W Research and Methods for Health Professions (3)
This course introduces students to the fundamentals of research methods and basic statistical analysis, with a focus on application in healthcare. Students will develop skills to design ethical research, analyze small datasets, and interpret and discuss study findings.

HSC360 Sustainability and Human Health (3)
This course examines the intersection of climate change, sustainability, and human health. Students will explore how climate change impacts ecosystems and human populations, focusing on health outcomes, sustainability frameworks, and their application to healthcare delivery, aiming to equip students with the knowledge to address environmental challenges in health contexts.
Prerequisite: HSC240

HSC410W Evidence-Based Practice in Healthcare (3)
This course introduces healthcare students to the evidence-based practice process, focusing on integrating research evidence, clinical expertise, and patient needs to guide decision-making. Students will learn to formulate evidence-based practice questions, find credible evidence, critically appraise research, and effectively summarize findings in scientific writing.
Prerequisite: HSC350W

HSC420 Patient Safety and Quality (3)
The course equips students with practical tools to promote a culture of safety and continuous improvement, with content on patient safety and healthcare quality,

outcomes management, utilization, practice variation, and safety threats. Students will identify and mitigate common healthcare errors using quality assurance and quality improvement models through case studies.
Prerequisite: HSC340

HSC430 Community Health (3)
This course provides an understanding of the role and responsibilities of a Community Health Worker (CHW) in linking health and social services to improve community health outcomes. The course covers the functions of public health, an overview of epidemiology, and the practical skills required for effective health communication and education.
Prerequistie: HSC240

HSC450 Health Education and Health Promotion (3)
This course provides a comprehensive understanding of the theoretical foundations of health education and promotion. Historical development of several health promotion models will be explored. Their application in health promotion practice, and ongoing developments in the field will be assessed through design, implementation, and evaluation of health promotion programs.
Prerequisite: HSC310

HSC490 Integrative Capstone Seminar (3)
This case-based course requires students to apply advanced knowledge, skills, and abilities developed throughout their academic training. Course content will help prepare students to pursue a career in health and wellness, prepare for certification exams, and matriculate to advanced health science degree programs.
Prerequisite: HSC450

HSC633I Global Health Perspectives Part One (1)
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)
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. Additional Fee(s): Travel fee

HSC634I Global Health I (1)
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.

HSC634II Global Health II (1)
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. Additional Fee(s): Travel fee

IAR: INTERIOR ARCHITECTURE

IAR105 Environment and Behavior (3)
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)
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. Additional Fee(s): Course fee

IAR210 2D Visual Communication (3)
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.

IAR211 Design Fundamentals I (3)
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.

IAR213 Special Topics (3)
Special topic.

IAR214 Digital Visualization I (3)
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. Additional Fee(s): Course fee.

IAR215 Digital Visualization II (3)
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 rending software are covered. Additional Fee: Course fee.
Prerequisite: IAR219

IAR217 Interior Architecture I (3)
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.

IAR218 Building Codes (3)
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.
*Prerequisite: IAR220 **or** IAR225*

IAR219 Design Fundamentals II (3)
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.

IAR220 Interior Architecture II (3)
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.

IAR225 Interior Architecture III (3)
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 fee.
Prerequisite: IAR217

IAR230 Interior Materials (3)
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.

IAR231 Green & Sustainable Design (3)
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)
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.

IAR260 Fallingwater Studio Residency (3)
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. Additional Fee(s): Travel fee.
Prerequisite: IAR219

IAR261W History of Interior Architecture: Pre-20th Century (3)
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.

IAR262W 20th and 21st Century Architecture (3)
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.

IAR310 Digital Visualization III (3)
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(s): Course fee.
*Prerequisites: IAR210 **and** IAR215*

IAR315 Construction Documents (3)
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 fee.
*Prerequisite: IAR225 **or** IAR310*

IAR316 Portfolio (3)
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 Fee(s): Course fee
Prerequisite: IAR214

IAR321 Interior Architecture IV (3)
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.
Prerequisite: IAR225

IAR325 Interior Architecture IV (3)
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 fee.
*Prerequisites: IAR310, IAR31, IAR320, **and** IAR330*

IAR326 Interior Architecture V (6)
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.

IAR330 Construction Systems & Methods (3)
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.

IAR335 Lighting & Acoustics (3)
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 fee.
Prerequisite: IAR230

IAR441 Environmental/Sustainable Community Service (1)
Encouraging environmental stewardship, students are required to participate in an environmental community service project under the supervision of a field leader or faculty member.
Prerequisite: IAR215

IAR443 Community Service (1)
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.

IAR445 Professional Practice (3)
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.

IAR470 Immersive Research Design (3)
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.

IAR490 Integrative Capstone (3)
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.

IAR491 Independent Study (1)

IAR492 Independent Study (2)

IAR493 Independent Study (3)
Prerequisite: Permission of Instructor

IAR502 Theory of Interior Architecture (3)
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 (3)
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.

IAR510 2D Visual Communications (3)
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.

IAR514 Digital Visualization I (3)
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.

IAR515 Digital Visualization II (3)
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 fee.
Prerequisite: IAR510

IAR517 Interior Architecture I (3)
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.

IAR518 Building Codes (3)
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 **and** IAR535*

IAR519 Drafting and Model Making (3)
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.

IAR520 Interior Architecture II (3)
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.
*Prerequisites: IAR510, IAR519, **and** IAR532*

IAR525 Interior Architecture Studio III (3)
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. Additional Fee: Course fee.
*Prerequisites: IAR502, IAR515, IAR520, **and** IAR535*

IAR526 Interior Architecture IV (3)
The studio addresses problem identification and solutions in the context of large scale projects of complex scope. Emphasis is placed on programming, detail drawing, universal design principles, space planning, spatial experience, scale, materials, furniture, fixtures, equipment, and color with respect to user needs.
*Prerequisites: IAR515, IAR518, **and** IAR520*

IAR530 Interior Materials (3)
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. Additional Fee: Course fee.

IAR561 History of Interior Architecture (3)
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.

IAR562 20th & 21st Century Architecture (3)
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.

IAR610 Digital Visualization III (3)
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 fee

IAR615 Construction Documents (3)
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 Fees
Corequisite: IAR620
*Prerequisites: IAR525 **and** IAR610*

IAR616 Portfolio (3)
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.

IAR620 Interior Architecture Studio IV (3)
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.

IAR621 Interior Architecture V (3)
This advanced studio addresses concept development, design development, and detailing of 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.
*Prerequisites: IAR515, IAR518, **and** IAR520*

IAR630 Construction Systems and Methods (3)
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)
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 (3)
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 Fees: Course Fee
Prerequisite: IAR519

IAR641 Internship (3)
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.
Prerequisite: Permission of Instructor

IAR645 Professional Practice (3)
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)
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.
Prerequisite: IAR615

IAR654 Graduate Research Seminar (3)
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.

IAR655 Immersive Design Research (3)
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.

IAR660 Interior Architecture VI Capstone (3)
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.
Prerequisite: IAR621

IAR661 Interior Architecture Inquiry (3)
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.

IAR662 Issues in Interior Architecture (3)
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.

IAR665 Special Topics in Interior Architecture (3)
Special topics

IAR670 Supervised Teaching (3)
Prerequisite: Permission of Instructor

IAR675 Independent Study (3)
In-depth investigation conducted independently by the student under the supervision of an instructor. This course may be taken to satisfy an elective requirement.
Prerequisite: Permission of Instructor

IAR680 Thesis Development (3)
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.
*Prerequisites: ENG528, IAR655, IAR661, **and** IAR662*

IAR681 Thesis (3)
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.
Prerequisite: IAR680

IAR691 Independent Study (1)
Prerequisite: Permission of Instructor

IAR692 Independent Study (2)
Prerequisite: Permission of Instructor

IAR693 Independent Study (3)
Prerequisite: Permission of Instructor

IAR800 Graduate Continuing Credit (1)

IMM: IMMERSIVE MEDIA

IMM103 Introduction to Immersive Media (3)
Students receive an introduction to 3d modeling, programming, architectural and design theory, and start learning the skills and technology necessary to build immersive experiences.

IMM113 Engineering for Artists (3)
This course introduces foundational technologies and engineering principles that are utilized by artists, creators, and media designers. Projects leverage real-life hardware, sensors, lights, buttons, and other tools that allow students to make interactive devices, toys, and art pieces. The concepts examine systems as a framework for problem solving. Additional Fee(s): Course fee.

IMM202 Introduction to Game Design (3)
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.

IMM210 3D Modeling Methods & Practice (1)
Students will learn transferrable fundamentals of modern 3D software. The course focuses on the principles, techniques, and processes that power all creative 3D software and their applications. Topics include modeling, photogrammetry, sculpting, textures, and more. Students will create models and artistic renders.

IMM215 Programming for Immersive Experiences (3)
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.
Prerequisite: IMM103

IMM220 Studio I: 3D Interfaces & User Experience (3)
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.
*Prerequisites: IMM202 **and** IMM215*

IMM225 Immersive Media Production: Experiences (3)
This course advances the students in all aspects of immersive media production and project development. Students explore immersive technology, engage in critical feedback sessions, and learn professional documentation practices. Students will propose and create multiple immersive media projects while utilizing iterative production workflows.

IMM240 Immersive Design Seminar (3)
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.

IMM250 Human Centered Design (3)
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.

IMM280 Topics in Creative Technology (3)
This course provides an overview of academic, artistic, and commercial applications of digital technologies. This survey of speculative interfaces demonstrates the significance and context of digital media. Students learn how everyday interactions with technology are influenced by and in turn influence media culture in modern society.

IMM311 Studio II: Architecture and Environments (3)
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. This course is to be taken alongside an appropriate Immersive Media Production course.
Prerequisite: IMM220
Corequisite: IMM325

IMM313 Special Topics (3)
Special topics

IMM325 Immersive Media Production: Environment Design (3)
This course advances the students in all aspects of immersive media production and project development. Students explore immersive technology, engage in critical feedback sessions, and learn professional documentation practices. Students will propose and create multiple immersive media projects while utilizing iterative production workflows.

IMM371 Studio III: Serious Play (3)
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.

IMM406 Studio IV: Prototyping for Advanced Systems (3)
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.
Prerequisite: IMM220

IMM425 Immersive Media Production: Access (3)
This course advances the students in all aspects of immersive media production and project development. Students explore immersive technology, engage in critical feedback sessions, and learn professional documentation practices. Students will propose and create multiple immersive media projects while utilizing iterative production workflows.

IMM456W Studio V: Ethics and Access (3)
This course advances the students in all aspects of immersive media production and project development. Students explore immersive technology, engage in critical feedback sessions, and learn professional documentation practices. Students will propose and create multiple immersive media projects while utilizing iterative production workflows.
*Prerequisite: IMM220 **or** IMM311*
Corequisite:: IMM425

IMM470W Immersive Design Research (3)
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.
*Prerequisites: IMM220 **and** IMM250*

IMM490 Integrative Capstone (3)
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, 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.
*Prerequisites: IMM220 **and** IMM470W*

IMM493 Independent Study (3)
Prerequisite: Permission of Instructor

IND: INTERDISCIPLINARY STUDIES

IND101 Foundations of Learning: Theory & Application (1)
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.

IND104 LSAT Preparation (1)
This course will help students prepare for the LSAT, by focusing on study skills particular to this examination.

IND109 Leadership Theory and Practice (3)
This course is designed to introduce students to models and theories of leadership and leading in diverse contexts. Students will explore questions like "What is leadership?", "Who can be a leader?", and "How does understanding self and others influence leadership?" through learning modules, self-assessments, critical reflection, and active learning.

IND113 Special Topics (1)
Special topics

IND115 Global Focus Seminar (1)
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.

IND130 Social Activism Institute (1)
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.

IND131 A Playful Approach to Learning through LEGO (1)
Students will engage in a modified version of the Brick-by-Brick programming developed by Play Included to hone their problem solving, communication, and independent learning skills. By collaboratively navigating and narrating LEGO build challenges, students will develop resiliency, a sense of ownership, accomplishment, and self-efficacy in a play-based environment.

IND175 Academic Resources and Strategies for Nurses (2)
This course will explore skills and knowledge that promote academic success for the professional nurse. Topics include retrieving, critiquing, and applying resources, scholarly writing development, academic integrity, time management, and self-care.

IND200W Introduction to Scientific Research (2)
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.

IND207 Systems of Social Identity, Power, and Justice (3)
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.

IND210 Chatham Semester International Internship Preparation Seminar (3)
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.

IND213 Special Topics (3)
Special topics

IND245 Fostering Inclusive Communities in Residential Settings (3)
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.

IND246 Intergroup Dialogue Facilitator Training (3)
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, culture cues, and judgements.

IND247 Intergroup Dialogue Seminar (3)
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.).

IND248 Practicum in Facilitating Intergroup Dialogues (4)
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.

IND250 Technology in the Workplace (2)
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.

IND309 Leadership and Change (3)
This course examines models of change with particular emphasis on group processes and the role of leadership. The course analyzes resistance to change and how leadership processes can facilitate and motivate change. Techniques for effective communication and identifying the need for change and individuals' readiness for change are discussed.
Prerequisite: IND109

IND310 Chatham Semester International Internship Reflection Seminar (3)
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.
Prerequisite: IND210

IND350W Scientific Research Methods (2)
This course equips students with essential skills for conducting and communicating research. Students will learn to identify research topics, evaluate scientific literature, develop advanced search strategies, and access discipline-specific sources.
The course covers experimental design, scientific ethics, citation methods, and effective use of figures and tables.
*Prerequisite: BIO209LW **or** CHM216LW **or** MTH215W*

IND491 Independent Study (1)
Prerequisite: Permission of Instructor

INT: INTERNSHIPS

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.

INTACT301 Internship: Accounting (1)

INTACT302 Internship: Accounting (2)

INTACT303 Internship: Accounting (3)

INTACT305 Internship: Accounting (5)

INTACT306 Internship: Accounting (6)

INTACT308 Internship: Accounting (8)

INTACT313 Internship: Accounting (13)

INTART301 Internship: Art (1)

INTART302 Internship: Art (2)

INTART303 Internship: Art (3)

INTART304 Internship: Art (4)

INTBIO301 Internship: Biology (1)

INTBIO302 Internship: Biology (2)

INTBIO303 Internship: Biology (3)

INTBIO305 Internship: Biology (5)

INTBIO307 Internship: Biology (7)

INTBIO309 Internship: Biology (9)

INTBUS301 Internship: Business (1)

INTBUS302 Internship: Business (2)

INTBUS303 Internship: Business (3)

INTBUS305 Internship: Business (5)

INTBUS306 Internship: Business (6)

INTBUS309 Internship: Business (9)

INTBUS313 Internship: Business (13)

INTCHM301 Internship: Chemistry (1)

INTCHM302 Internship: Chemistry (2)

INTCHM303 Internship: Chemistry (3)

INTCOM301 Internship: Communication (1)

INTCOM302 Internship: Communication (2)

INTCOM303 Internship: Communication (3)

INTCOM304 Internship: Communication (4)

INTCOM305 Internship: Communication (5)

INTCOM306 Internship: Communication (6)

INTCRM301 Internship: Criminology (1)

INTCRM302 Internship: Criminology (2)

INTCRM303 Internship: Criminology (3)

INTCRM304 Internship: Criminology (4)

INTCRM306 Internship: Criminology (6)

INTCST301 Internship: Cultural Studies (1)

INTCST302 Internship: Cultural Studies (2)

INTCST303 Internship: Cultural Studies (3)

INTCST304 Internship: Cultural Studies (4)

INTDSA301 Internship: Data Science Analytics (1)

INTDSA302 Internship: Data Science Analytics (2)

INTDSA303 Internship: Data Science Analytics (3)

INTECN301 Internship: Economics (1)

INTECN302 Internship: Economics (2)

INTECN303 Internship: Economics (3)

INTEDU301 Internship: Education (1)

INTEDU302 Internship: Education (2)

INTEDU303 Internship: Education (3)

INTEDU407 Internship: Education (7)

INTENG301 Internship: English (1)

INTENG302 Internship: English (2)

INTENG303 Internship: English (3)

INTENG304 Internship: English (4)

INTENG305 Internship: English (5)

INTENV301 Internship: Environmental Studies (1)

INTENV302 Internship: Environmental Studies (2)

INTENV303 Internship: Environmental Studies (3)

INTEXS301 Internship: Exercise Science (1)

INTEXS302 Internship: Exercise Science (2)

INTEXS307 Internship: Exercise Science (7)

INTEXS309 Internship: Exercise Science (9)

INTFDT301 Internship: Film and Digital Technology (1)

INTFDT302 Internship: Film and Digital Technology (2)

INTFDT303 Internship: Film and Digital Technology (3)

INTFDT306 Internship: Film and Digital Technology (6)

INTFRN303 Internship: French (3)

INTFST301 Internship: Food Studies (1)

INTFST302 Internship: Food Studies (2)

INTFST303 Internship: Food Studies (3)

INTHIS301 Internship: History (1)

INTHIS302 Internship: History (2)

INTHIS303 Internship: History (3)

INTIAR301 Internship: Interior Architecture (1)

INTIAR302 Internship: Interior Architecture (2)

INTIAR303 Internship: Interior Architecture (3)

INTIHS302 Internship: Integrative Health Studies (2)

INTIHS303 Internship: Integrative Health Studies (3)

INTIMM303 Internship: Immersive Media (3)

INTISP303 Internship: International Studies (3)

INTMTH301 Internship: Mathematics (1)

INTMTH302 Internship: Mathematics (2)

INTMTH303 Internship: Mathematics (3)

INTMUS301 Internship: Music (1)

INTMUS302 Internship: Music (2)

INTMUS303 Internship: Music (3)

INTPHY301 Internship: Physics (1)

INTPHY302 Internship: Physics (2)

INTPHY303 Internship: Physics (3)

INTPOL301 Internship: Political Science (1)

INTPOL302 Internship: Political Science (2)

INTPOL303 Internship: Political Science (3)

INTPOL304 Internship: Political Science (4)

INTPOL305 Internship: Political Science (5)

INTPOL306 Internship: Political Science (6)

INTPSY301 Internship: Psychology (1)

INTPSY302 Internship: Psychology (2)

INTPSY303 Internship: Psychology (3)

INTPSY304 Internship: Psychology (4)

INTPSY305 Internship: Psychology (5)

INTPSY306 Internship: Psychology (6)

INTPSY309 Internship: Psychology (9)

INTPSY312 Internship: Psychology (12)

INTREL301 Internship: Religion (1)

INTREL302 Internship: Religion (2)

INTREL303 Internship: Religion (3)

INTSUS301 Internship: Sustainability (1)

INTSUS302 Internship: Sustainability (2)
Prerequisite: Permission of Instructor

INTSUS303 Internship: Sustainability (3)

INTSUS312 Internship: Sustainability (12)

INTSWK301 Internship: Social Work (1)

INTSWK302 Internship: Social Work (2)

INTSWK303 Internship: Social Work (3)

INTWGS301 Internship: Women's and Gender Studies (1)

INTWGS302 Internship: Women's and Gender Studies (2)

INTWGS303 Internship: Women's and Gender Studies (3)

LNG: LANGUAGES

LNG101 Introduction to Arabic Language and Culture I (3)
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.

LNG101L Introduction to Arabic Language and Culture I - Lab (1)
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.

LNG102 Introduction to Arabic Language and Culture II (3)
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.

LNG102L Introduction to Arabic Language and Culture II-Lab (1)
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 102.

LNG120 East Asian Scripts: Philosophy, Poetics, Practice (1)
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.

LNG121 Introduction to Chinese Language and Culture I (3)
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.

LNG121L Introduction to Chinese Language and Culture I-Lab (1)
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 LNG121.

LNG122 Introduction to Chinese Language and Culture II (3)
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.

LNG122L Introduction to Chinese Language and Culture II-Lab (1)
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 LNG122.

LNG131 Introduction to French Language and Culture I (3)
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.

LNG131L Introduction to French Language and Culture I-Lab (1)
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 LNG131.

LNG132 Introduction to French Language and Culture II (3)
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.

LNG132L Introduction to French Language and Culture II-Lab (1)
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 LNG132.

LNG141 Introduction to German Language and Culture I (3)
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.

LNG141L Introduction to German Language and Culture I-Lab (1)
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 LNG141.

LNG142 Introduction to German Language and Culture II (3)
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.

LNG142L Introduction to German Language and Culture II - Lab (1)
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.
Corequisite: LNG142

LNG151 Introduction to Japanese Language and Culture I (3)
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.

LNG151L Introduction to Japanese Language and Culture I-Lab (1)
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 LNG151.

LNG152 Introduction to Japanese Language and Culture II (3)
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.

LNG152L Introduction to Japanese Language and Culture II-Lab (1)
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 LNG152.

LNG161 Introduction to Spanish Language and Culture I (3)
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.

LNG161L Introduction to Spanish Language and Culture I-Lab (1)
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.

LNG162 Introduction to Spanish Language and Culture II (3)
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.

LNG162L Introduction to Spanish Language and Culture II-Lab (1)
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 162.

LNG201 Intermediate Arabic Language and Culture I (3)
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.

LNG201L Intermediate Arabic Language and Culture I-Lab (1)
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.

LNG202 Intermediate Arabic Language and Culture II (3)
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.

LNG202L Intermediate Arabic Language and Culture II-Lab (1)
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 202.

LNG221 Intermediate Chinese Language and Culture I (3)
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.

LNG221L Intermediate Chinese Language and Culture I-Lab (1)
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.

LNG222 Intermediate Chinese Language and Culture II (3)
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.

LNG222L Intermediate Chinese Language and Culture II (1)
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 222.

LNG231 Intermediate French Language and Culture I (3)
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)
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)
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)
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.

LNG241 Intermediate German Language and Culture I (3)
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)
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)
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)
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.

LNG251 Intermediate Japanese Language and Culture I (3)
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.

LNG251L Intermediate Japanese Language and Culture I-Lab (1)
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.

LNG252 Intermediate Japanese Language and Culture II (3)
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.

LNG252L Intermediate Japanese Language and Culture II-Lab (1)
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.

LNG261 Intermediate Spanish Language and Culture I (3)
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)
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.

LNG262 Intermediate Spanish Language and Culture II (3)
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.

LNG262L Intermediate Spanish Language and Culture II-Lab (1)
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.

LNG313 Special Topics (3)
This course will cover in-depth, topical analysis of contemporary issues in the discipline not covered in other courses in the program.

LNG331 French Grammar, Composition and Conversation (3)
This course bridges students from language courses to discipline studies in French. Students will review foundational grammar and vocabulary through short films, music, poetry, and other authentic documents with a focus on reading, writing, listening, and speaking. Ideal for students who have completed Intermediate French.

LNG361 Spanish Grammar, Conversation and Conversation (3)
This course bridges students from language courses to discipline studies in Spanish. Students will review foundational grammar and vocabulary through short films, music, poetry, and other authentic documents with a focus on reading, writing, listening, and speaking. Ideal for students who have completed Intermediate Spanish.

LNG341 German Grammar, Composition and conversation (3)
This course bridges students from language courses to discipline studies in German. Students will review foundational grammar and vocabulary through short films, music, poetry, and other authentic documents with a focus on reading, writing, listening, and speaking. Ideal for students who have completed Intermediate German.

MTH: MATHEMATICS

MTH103 Mathematical Reasoning (3)
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.

MTH104 Statistics for Everyday Life (3)
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.

MTH108 Precalculus (3)
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.

MTH110 Elementary Statistics (3)
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.

MTH151 Calculus I (4)
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)
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.
Prerequisite: MTH151

MTH215W Introduction to Proof (4)
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.
Prerequisite: MTH152

MTH221 Linear Algebra (3)
Topics include finite dimensional vector spaces, geometry of R, linear functions, systems of linear equations, and theory of matrices and determinants.
Prerequisite: MTH151

MTH222 Multivariate and Vector Calculus (3)
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.
Prerequisite: MTH152

MTH241 Differential Equations (3)
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.
Prerequisite: MTH152

MTH244 Discrete Mathematics (3)
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.
Prerequisite: MTH152

MTH256 The History and Theory of Numbers (3)
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.
*Prerequisite: MTH108 **or** MTH151*

MTH310 Probability (3)
Explore the fascinating world of numbers—discover the impact mathematicians throughout time had on the world today, emphasizing women and marginalized groups. Discover using hands-on activities, the topics of prime factorization, the Fibonacci sequence, irrational numbers, among others, while learning how math powers everything from investment strategies to encryption.

MTH327 Advanced Analysis (3)
Foundations for abstract analysis, real and complex number systems, elements of point set topology and limits, continuity, and derivatives.
*Prerequisites: MTH215W **and** MTH222*

MTH341 Abstract Algebra (3)
Introduction to elements of modern abstract algebra, including rings, groups, and fields.
*Prerequisites: MTH215W **and** MTH221*

MTH490 Integrative Capstone (3)
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.
Prerequisite: IND350W

MTH493 Independent Study (3)
Prerequisite: Permission of Instructor

MUA: MUSIC (APPLIED)

MUA100 Piano (1)
One 30-minute lesson per week. Additional Fee(s): Applied music fee.

MUA101 Piano (1)
One 30-minute lesson per week. Additional Fee(s): Applied music fee.

MUA102 Voice (1)
One 30-minute lesson per week. Additional Fee(s): Applied music fee.

MUA103 Voice (1)
One 30-minute lesson per week. Additional Fee(s): Applied music fee.

MUA104B Piano Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA104C Piano Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA105B Piano Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA105C Piano Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA106B Voice Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA106C Voice Level I (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.

MUA107B Voice Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA107C Voice Level I (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.

MUA108B Guitar Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA108C Guitar Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA109B Guitar Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA109C Guitar Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA110B Violin Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA110C Violin Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA111B Violin Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA111C Violin Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA112B Viola Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA112C Viola Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA113B Viola Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA113C Viola Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA114B Cello Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA114C Cello Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA115B Cello Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA115C Cello Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA116B Double Bass Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA116C Double Bass Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA117B Double Bass Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA117C Double Bass Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA118B Harp Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA118C Harp Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA119B Harp Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA119C Harp Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA120B Flute Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA120C Flute Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA121B Flute Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA121C Flute Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA122B Oboe Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA122C Oboe Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA123B Oboe Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA123C Oboe Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA124B Clarinet Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA124C Clarinet Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA125B Clarinet Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA125C Clarinet Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA126B Bassoon Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA126C Bassoon Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA127B Bassoon Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA127C Bassoon Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA128B Saxophone Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA128C Saxophone Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA129B Saxophone Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA129C Saxophone Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA130B Horn Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA130C Horn Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA131B Horn Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA131C Horn Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA132B Trumpet Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA132C Trumpet Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA133B Trumpet Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA133C Trumpet Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA134B Trombone Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA134C Trombone Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA135B Trombone Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA135C Trombone Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA136B Euphonium Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA136C Euphonium Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA137B Euphonium Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA137C Euphonium Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA138B Tuba Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA138C Tuba Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA139B Tuba Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA139C Tuba Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA140B Percussion Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA140C Percussion Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA141B Percussion Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA141C Percussion Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA142B Drum Set Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA142C Drum Set Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA143B Drum Set Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA143C Drum Set Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA144B Electric Bass Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA144C Electric Bass Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA145B Electric Bass Level I (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUA145C Electric Bass Level I (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUA146B Composition Level I (2)
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.

MUA146C Composition Level I (3)
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.

MUA147B Composition Level I (2)
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.

MUA147C Composition Level I (3)
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.

MUA204B Piano Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA105B **or** MUA105C*

MUA204C Piano Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA105B **or** MUA105C*

MUA205B Piano Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA204B **or** MUA204C*

MUA205C Piano Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA204B **or** MUA204C*

MUA206B Voice Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA107B **or** MUA107C*

MUA206C Voice Level II (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA107B **or** MUA107C*

MUA207B Voice Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA206B **or** MUA206C*

MUA207C Voice Level II (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA206B **or** MUA206C*

MUA208B Guitar Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA109B **or** MUA109C*

MUA208C Guitar Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA109B **or** MUA109C*

MUA209B Guitar Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA208B **or** MUA208C*

MUA209C Guitar Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA208B **or** MUA208C*

MUA210B Violin Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee
*Prerequisite: MUA111B **or** MUA111C*

MUA210C Violin Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA111B **or** MUA111C*

MUA211B Violin Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA210B **or** MUA210C*

MUA211C Violin Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA210B **or** MUA210C*

MUA212B Viola Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA113B **or** MUA113C*

MUA212C Viola Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA113B **or** MUA137C*

MUA213B Viola Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA212B **or** MUA212C*

MUA213C Viola Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA212B **or** MUA212C*

MUA214B Cello Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA114B **or** MUA114C*

MUA214C Cello Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA114B **or** MUA114C*

MUA215B Cello Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA214B **or** MUA214C*

MUA215C Cello Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA214B **or** MUA214C*

MUA216B Double Bass Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA117B **or** MUA117C*

MUA216C Double Bass Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA117B **or** MUA117C*

MUA217B Double Bass Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA216B **or** MUA216C*

MUA217C Double Bass Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA216B **or** MUA216C*

MUA218B Harp Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA119B **or** MUA119C*

MUA218C Harp Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA119B **or** MUA119C*

MUA219B Harp Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA218B **or** MUA218C*

MUA219C Harp Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA218B **or** MUA218C*

MUA220B Flute Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA121B **or** MUA121C*

MUA220C Flute Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA121B **or** MUA121C*

MUA221B Flute Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA220B **or** MUA220C*

MUA221C Flute Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA220B **or** MUA220C*

MUA222B Oboe Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA123B **or** MUA123C*

MUA222C Oboe Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA123B **or** MUA123C*

MUA223B Oboe Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA222B **or** MUA222C*

MUA223C Oboe Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA222B **or** MUA222C*

MUA224B Clarinet Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA125B **or** MUA125C*

MUA224C Clarinet Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA125B **or** MUA125C*

MUA225B Clarinet Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: CMUA224B **or** MUA224C*

MUA225C Clarinet Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA224B **or** MUA224C*

MUA226B Bassoon Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA127B **or** MUA127C*

MUA226C Bassoon Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA127B **or** MUA127C*

MUA227B Bassoon Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA226B **or** MUA226C*

MUA227C Bassoon Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA226B **or** MUA226C*

MUA228B Saxophone Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA129B **or** MUA129C*

MUA228C Saxophone Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA129B **or** MUA129C*

MUA229B Saxophone Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA228B **or** MUA228C*

MUA229C Saxophone Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA228B **or** MUA228C*

MUA230B Horn Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA131B **or** MUA131C*

MUA230C Horn Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA131B **or** MUA131C*

MUA231B Horn Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA230B **or** MUA230C*

MUA231C Horn Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA230B **or** MUA230C*

MUA232B Trumpet Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA133B **or** MUA133C*

MUA232C Trumpet Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA133B **or** MUA133C*

MUA233B Trumpet Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA232B **or** MUA232C*

MUA233C Trumpet Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA232B **or** MUA232C*

MUA234B Trombone Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA135B **or** MUA135C*

MUA234C Trombone Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA135B **or** MUA135C*

MUA235B Trombone Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA234B **or** MUA234C*

MUA235C Trombone Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA234B **or** MUA234C*

MUA236B Euphonium Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA137B **or** MUA137C*

MUA236C Euphonium Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA137B **or** MUA137C*

MUA237B Euphonium Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA236B **or** MUA236C*

MUA237C Euphonium Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA236B **or** MUA236C*

MUA238B Tuba Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA139B **or** MUA139C*

MUA238C Tuba Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA139B **or** MUA139C*

MUA239B Tuba Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA238B **or** MUA238C*

MUA239C Tuba Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA238B **or** MUA238C*

MUA240B Percussion Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA141B **or** MUA141C*

MUA240C Percussion Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA141B **or** MUA141C*

MUA241B Percussion Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA240B **or** MUA240C*

MUA241C Percussion Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA240B **or** MUA240C*

MUA242B Drum Set Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA143B **or** MUA143C*

MUA242C Drum Set Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA143B **or** MUA143C*

MUA243B Drum Set Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA242B **or** MUA242C*

MUA243C Drum Set Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA242B **or** MUA242C*

MUA244B Electric Bass Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA145B **or** MUA145C*

MUA244C Electric Bass Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA145B **or** MUA145C*

MUA245B Electric Bass Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA244B **or** MUA244C*

MUA245C Electric Bass Level II (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA244B **or** MUA244C*

MUA246B Composition Level II (2)
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.
*Prerequisite: MUA147B **or** MUA147C*

MUA246C Composition Level II (3)
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.

MUA247B Composition Level II (2)
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.
*Prerequisite: MUA246B **or** MUA246C*

MUA247C Composition Level II (3)
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.
*Prerequisite: MUA246B **or** MUA246C*

MUA304B Piano Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA205B **or** MUA205C*

MUA304C Piano Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA205B **or** MUA205C*

MUA305B Piano Level II (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA304B **or** MUA304C*

MUA305C Piano Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA304B **or** MUA304C*

MUA306B Voice Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA207B **or** MUA207C*

MUA306C Voice Level III (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA207B **or** MUA207C*

MUA307B Voice Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA306B **or** MUA306C*

MUA307C Voice Level III (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA306B **or** MUA306C*

MUA308B Guitar Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA209B **or** MUA209C*

MUA308C Guitar Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA209B **or** MUA209C*

MUA309B Guitar Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA308B **or** MUA308C*

MUA309C Guitar Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA308B **or** MUA308C*

MUA310B Violin Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA211B **or** MUA211C*

MUA310C Violin Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA211B **or** MUA211C*

MUA311B Violin Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA310B **or** MUA310C*

MUA311C Violin Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA310B **or** MUA310C*

MUA312B Viola Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA213B **or** MUA213C*

MUA312C Viola Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA213B **or** MUA213C*

MUA313B Viola Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA312B **or** MUA312C*

MUA313C Viola Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA312B **or** MUA312C*

MUA314B Cello Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA215B **or** MUA215C*

MUA314C Cello Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA215B **or** MUA215C*

MUA315B Cello Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA314B **or**| MUA314C*

MUA315C Cello Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA314B **or** MUA314C*

MUA316B Double Bass Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA217B **or** MUA217C*

MUA316C Double Bass Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA217B **or** MUA217C*

MUA317B Double Bass Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA316B **or** MUA316C*

MUA317C Double Bass Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA316B **or** MUA316C*

MUA318B Harp Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA219B **or** MUA219C*

MUA318C Harp Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA219B **or** MUA219C*

MUA319B Harp Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA318B **or** MUA318C*

MUA319C Harp Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA318B **or** MUA318C*

MUA320B Flute Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA221B **or** MUA221C*

MUA320C Flute Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA221B **or** MUA221C*

MUA321B Flute Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA320B **or** MUA320C*

MUA321C Flute Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA320B **or** MUA320C*

MUA322B Oboe Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA223B **or** MUA223C*

MUA322C Oboe Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA223B **or** MUA223C*

MUA323B Oboe Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA322B **or** MUA322C*

MUA323C Oboe Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA322B **or** MUA322C*

MUA324B Clarinet Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA225B **or** MUA225C*

MUA324C Clarinet Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA225B **or** MUA225C*

MUA325B Clarinet Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA324B **or** MUA324C*

MUA325C Clarinet Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA324B **or** MUA324C*

MUA326B Bassoon Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA227B **or** MUA227C*

MUA326C Bassoon Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA227B **or** MUA227C*

MUA327B Bassoon Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA326B **or** MUA326C*

MUA327C Bassoon Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA326B **or** MUA326C*

MUA328B Saxophone Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA229B **or** MUA229C*

MUA328C Saxophone Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA229B **or** MUA229C*

MUA329B Saxophone Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA328B **or** MUA328C*

MUA329C Saxophone Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA328B **or** MUA328C*

MUA330B Horn Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA231B **or** MUA231C*

MUA330C Horn Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA231B **or** MUA231C*

MUA331B Horn Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA330B **or** MUA330C*

MUA331C Horn Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA330B **or** MUA330C*

MUA332B Trumpet Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA233B **or** MUA233C*

MUA332C Trumpet Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA233B **or** MUA233C*

MUA333B Trumpet Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA332B **or** MUA332C*

MUA333C Trumpet Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA332B **or** MUA332C*

MUA334B Trombone Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA235B **or** MUA235C*

MUA334C Trombone Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA235B **or** MUA235C*

MUA335B Trombone Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA334B **or** MUA334C*

MUA335C Trombone Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA334B **or** MUA334C*

MUA336B Euphonium Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA237B **or** MUA237C*

MUA336C Euphonium Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA237B **or** MUA237C*

MUA337B Euphonium Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA336B **or** MUA336C*

MUA337C Euphonium Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA336B **or** MUA336C*

MUA338B Tuba Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA239B **or** MUA239C*

MUA338C Tuba Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA239B **or** MUA239C*

MUA339B Tuba Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA338B **or** MUA338C*

MUA339C Tuba Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA338B **or** MUA338C*

MUA340B Percussion Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA241B **or** MUA241C*

MUA340C Percussion Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA241B **or** MUA241C*

MUA341B Percussion Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA340B **or** MUA340C*

MUA341C Percussion Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA340B **or** MUA340C*

MUA342B Drum Set Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA243B **or** MUA243C*

MUA342C Drum Set Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA243B **or** MUA243C*

MUA343B Drum Set Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA342B **or** MUA342C*

MUA343C Drum Set Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA342B **or** MUA342C*

MUA344B Electric Bass Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA245B **or** MUA245C*

MUA344C Electric Bass Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA245B **or** MUA245C*

MUA345B Electric Bass Level III (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA344B **or** MUA344C*

MUA345C Electric Bass Level III (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA344B **or** MUA344C*

MUA346B Composition Level III (2)
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.
*Prerequisite: MUA247B **or** MUA247C*

MUA346C Composition Level III (3)
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.
*Prerequisite: MUA247B **or** MUA247C*

MUA347B Composition Level III (2)
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.
*Prerequisite: MUA346B **or** MUA346C*

MUA347C Composition Level III (3)
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.
*Prerequisite: MUA346B **or** MUA346C*

MUA404B Piano Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA305B **or** MUA305C*

MUA404C Piano Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA305B **or** MUA305C*

MUA405B Piano Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA404B **or** MUA404C*

MUA405C Piano Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA404B **or** MUA404C*

MUA406B Voice Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA307B **or** MUA307C*

MUA406C Voice Level IV (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA307B **or** MUA307C*

MUA407B Voice Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA406B **or** MUA406C*

MUA407C Voice Level IV (3)
One 60-minute lesson per week plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA406B **or** MUA406C*

MUA408B Guitar Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA309B **or** MUA309C*

MUA408C Guitar Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA309B **or** MUA309C*

MUA409B Guitar Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA408B **or** MUA408C*

MUA409C Guitar Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA408B **or** MUA408C*

MUA410B Violin Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA311B **or** MUA311C*

MUA410C Violin Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA311B **or** MUA311C*

MUA411B Violin Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA410B **or** MUA410C*

MUA411C Violin Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA410B **or** MUA410C*

MUA412B Viola Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA313B **or** MUA313C*

MUA412C Viola Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA313B **or** MUA313C*

MUA413B Viola Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA412B **or** MUA412C*

MUA413C Viola Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA412B **or** MUA412C*

MUA414B Cello Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA315B **or** MUA315C*

MUA414C Cello Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA315B **or** MUA315C*

MUA415B Cello Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA414B **or** MUA414C*

MUA415C Cello Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA414B **or** MUA414C*

MUA416B Double Bass Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA317B **or** MUA317C*

MUA416C Double Bass Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA317B **or** MUA317C*

MUA417B Double Bass Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA416B **or** MUA416C*

MUA417C Double Bass Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA416B **or** MUA416C*

MUA418B Harp Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA319B **or** MUA319C*

MUA418C Harp Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA319B **or** MUA319C*

MUA419B Harp Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA418B **or** MUA418C*

MUA419C Harp Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA418B **or** MUA418C*

MUA420B Flute Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA321B **or** MUA321C*

MUA420C Flute Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA321B **or** MUA321C*

MUA421B Flute Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA420B **or** MUA420C*

MUA421C Flute Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA420B **or** MUA420C*

MUA422B Oboe Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA323B **or** MUA323C*

MUA422C Oboe Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA323B **or** MUA323C*

MUA423B Oboe Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA422B **or** MUA422C*

MUA423C Oboe Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA422B **or** MUA422C*

MUA424B Clarinet Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA325B **or** MUA325C*

MUA424C Clarinet Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA325B **or** MUA325C*

MUA425B Clarinet Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA424B **or** MUA424C*

MUA425C Clarinet Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA424B **or** MUA424C*

MUA426B Bassoon Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA327B **or** MUA327C*

MUA426C Bassoon Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA327B **or** MUA327C*

MUA427B Bassoon Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA426B **or** MUA426C*

MUA427C Bassoon Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA426B **or** MUA426C*

MUA428B Saxophone Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA329B **or** MUA329C*

MUA428C Saxophone Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA329B **or** MUA329C*

MUA429B Saxophone Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA428B **or** MUA428C*

MUA429C Saxophone Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA428B **or** MUA428C*

MUA430B Horn Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA331B **or** MUA331C*

MUA430C Horn Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA331B **or** MUA331C*

MUA431B Horn Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: CMUA430B **or** MUA430C*

MUA431C Horn Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA430B **or** MUA430C*

MUA432B Trumpet Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA333B **or** MUA333C*

MUA432C Trumpet Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA333B **or** MUA333C*

MUA433B Trumpet Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA432B **or** MUA432C*

MUA433C Trumpet Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA432B **or** MUA432C*

MUA434B Trombone Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA335B **or** MUA335C*

MUA434C Trombone Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA335B **or** MUA335C*

MUA435B Trombone Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA434B **or** MUA434C*

MUA435C Trombone Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA434B **or**| MUA434C*

MUA436B Euphonium Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA337B **or** MUA337C*

MUA436C Euphonium Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA337B **or** MUA337C*

MUA437B Euphonium Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA436B **or** MUA436C*

MUA437C Euphonium Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA436B **or** MUA436*

MUA438B Tuba Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA339B **or** MUA339C*

MUA438C Tuba Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA339B **or** MUA339C*

MUA439B Tuba Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA438B **or** MUA438C*

MUA439C Tuba Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA438B **or** MUA438C*

MUA440B Percussion Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA341B **or** MUA341C*

MUA440C Percussion Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA341B **or** MUA341C*

MUA441B Percussion Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA440B **or** MUA440C*

MUA441C Percussion Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA440B **or** MUA440C*

MUA442B Drum Set Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA343B **or** MUA343C*

MUA442C Drum Set Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA343B **or** MUA343C*

MUA443B Drum Set Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA442B **or** MUA442C*

MUA443C Drum Set Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA442B **or** MUA442C*

MUA444B Electric Bass Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA345B **or** MUA345C*

MUA444C Electric Bass Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA345B **or** MUA345C*

MUA445B Electric Bass Level IV (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.
*Prerequisite: MUA444B **or** MUA444C*

MUA445C Electric Bass Level IV (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.
*Prerequisite: MUA444B **or** MUA444C*

MUA446B Composition Level IV (2)
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.
*Prerequisite: MUA347B **or** MUA347C*

MUA446C Composition Level IV (3)
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.
*Prerequisite: MUA347B **or** MUA347C*

MUA447B Composition Level IV (2)
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.
*Prerequisite: MUA446B **or** MUA446C*

MUA447C Composition Level IV (3)
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.
*Prerequisite: MUA446B **or** MUA446C*

MUS: MUSIC

MUS150 History of Rock, Pop and Soul (3)
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.

MUS152 Class Piano I (2)
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.

MUS153 Class Piano II (2)
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.
Prerequisite: MUS152

MUS159 Music Fundamentals (3)
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.

MUS160 The Art of Music (3)
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.

MUS161 Music Theory and Analysis I (4)
The course introduces theoretical and analytic principles such as pitch, rhythmic, and formal structures that underpin a range of music including common practice Western music, jazz, popular music, and non-Western music. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.
Prerequisite: MUS159

MUS163 Introduction to Music Business (3)
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.

MUS171 Choir (1)
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.

MUS173 Instrumental Ensemble (1)
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.

MUS174 Jazz Survey (3)
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.

MUS184 Concert Band (1)
Students will study and perform works for ensembles of woodwinds, brass, and percussion in various combinations. This course may be repeated for credit.

MUS185 Jazz Ensemble (1)
Students will study and perform works for jazz ensemble. This course may be repeated for credit.

MUS186 Pep Band (1)
Students will study and perform works for athletic pep band. This course may be repeated for credit.

MUS195 Orchestral Instruments (1)
One 30-minute lesson per week. Corequisite: A music program course. Additional Fee(s): Applied music fee.

MUS196 Orchestral Instruments (2)
One 60-minute lesson per week. Additional Fee(s): Applied music fee.

MUS197 Orchestral Instruments (3)
One 60-minute lesson per week, plus performance. Additional Fee(s): Applied music fee.

MUS204 Music and Film (3)
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.

MUS205 Sound Recording Basics (3)
In this course students learn basic principles of sound recording and apply those concepts to an area of personal significance such as music performance.

MUS210 Music & the Natural World (3)
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.

MUS252 Music Theory and Analysis II (4)
The course delves into advanced theoretical and analytic principles such as pitch, rhythmic, and formal structures that underpin a range of music including common practice Western music, jazz, popular music, and non-Western music. The course includes an ear-training lab that features sight-singing, rhythmic performance, and melodic, harmonic and rhythmic dictation.
Prerequisite: MUS161

MUS262 Introduction to Computer Music (3)
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.

MUS266 World Music (3)
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.

MUS267W History of Music I (3)
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.

MUS350 Legal Issues in Music Performance and Production (3)
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.
Prerequisite: MUS163

MUS351 Audio Production (3)
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.
Prerequisite: MUS205

MUS352 Advanced Computer Music (3)
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.
*Prerequisite: MUS262 **or** MUS262*

MUS365 Advanced Music Theory and Analysis (3)
The course introduces students to advanced theoretical and analytic techniques for the study of a diverse body of music. The course focuses on music that falls outside

the common practice Western canon and can include 20th- and 21st-century avant-garde and experimental music, early music, popular music, jazz, and non-Western music..
Prerequisite: MUS161

MUS368W History of Music II (3)
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.
*Prerequisite: MUS267 **or** MUS267W*

MUS490 Integrative Capstone (3)
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.

MUS492 Independent Study (2)
Prerequisite: Permission of Instructor

MUS493 Independent Study (3)
Prerequisite: Permission of Instructor

MUS498 Tutorial: Music (4)

MUS499 Tutorial: Music (4)

N, NUR: NURSING

N111 Professional and Foundational Concepts of Nursing (12)
This course introduces the student to the professional and foundational concepts of nursing practice across the lifespan. 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. Basic care and comfort are 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.

N201 Physiological Concepts of Nursing (10)
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.

N301 Complex Individual and Family Nursing Concepts (11)
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.

N320 Advanced Nursing Concepts (7.5)
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 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.

N340 Transition Into Nursing Practice (5.5)
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.

N360 NCLEX Prep Course (2)
This course provides the students with NCLEX preparation through content reviews and test taking strategies.

NUR190 Critical Thinking for Nurses (1)
This one-credit course is designed to expose students enhance their study skills that will enhance application of learned material and increase success on nursing examinations. The course also provides ample NCLEX-RN style practice questions to improve accuracy in answering nursing examination items. Student will be expected to personally identify patterns in incorrect examination answers and develop personal plans for improvement.

NUR220 Exploring the Nursing Profession (1)
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 certification. These and other topics will help students gain a greater understanding of the nursing profession.

NUR402 Health Policy and Finance for Nurses (3)
This course will explore foundations of policy, finance, legislation, and regulation in complex systems of healthcare. Policy related to health equity, health disparity, and social justice will also be analyzed. Students will strengthen nurse advocacy skills and understanding of the Registered Nurse Scope and Standards of Practice.

NUR403 Women's Health Nursing (3)
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.

NUR407 Scholarship Foundations in Nursing (3)
This course will explore scholarly practice in nursing, including research and evidence-based practice. Conducted literature searches will discover support for a student-identified contemporary nursing issue. Ethical principles of nursing research, particularly protection of human subjects and other ethical accountabilities focusing on research utilization and evidence-based practice, will be examined.

NUR409 Clinical Prevention, Population and Environmental Health (3)
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.

NUR409W Community Health and Prevention (3)
This course will explore community health, health promotion, and illness prevention across the continuum of care. Students will investigate the nurse's role in population healthcare as well as public health emergencies and disasters.

NUR410 Global, Cultural, and Diverse Populations (3)
This course will explore the student's understanding and role as a nurse leader in a global society while reflecting on personal and professional values and implicit biases. Ethical, equitable, person- centered, compassionate, and empathetic care opportunities will be examined.

NUR411 Geriatric Nursing (3)
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.

NUR412 Organizational Quality Improvement and Safety (3)
This course will explore the nurse's foundational role in leading a person-centered healthcare environment through quality improvement and safety measures in collaboration with the interprofessional team. Ethical and cultural considerations related to quality improvement will be analyzed.

NUR414 Nursing Informatics, Technology, and Communication (3)
This course will explore how nurses use data, technology, and communication to create high-quality person-centered care. Students will demonstrate appropriate and ethical use of these modalities to impact clinical judgment. An emphasis on HIPAA privacy and security requirements will be introduced.

NUR415 Contemporary Issues in Nursing (3)
This course will explore and analyze contemporary issues nurses experience in healthcare. Ethical, bioethical, and social issues will be highlighted. Students will develop skills related to self-care and resilience.

NUR499W Leadership and Professional Identity Development (3)
This course, which fulfills Chatham's internship requirement, will explore aspects of leadership, professionalism, and professional identity for nurses. The course synthesizes the knowledge and competencies acquired throughout the program to enable the nurse to implement leadership in the practice setting.

NUR501 Scientific Underpinnings: Practice and Scholarship (3)
This course examines disciplinary knowledge and scholarship for innovation in practice, guidance with clinical judgement, and transformation of healthcare. Principles of research, evidence-based practice, and theory will be incorporated to assist with generation, translation, application and integration of scholarship into nursing practice.

NUR503 Informatics Foundation and Health Care Technology (3)
This course focuses on technology and informatics in healthcare delivery. Students will evaluate current and emerging technologies used for data driven decision-making to support quality healthcare outcomes. Key to this foundational knowledge will be skills developed to effectively communicate, coordinate, and analyze change resulting from the utilization of technology.

NUR504 Introduction to Organizational Leadership in Nursing (3)
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)
This course provides an exploration of key concepts in pathophysiology, physical assessment, and pharmacotherapy across the lifespan for the masters prepared nurse. Cultural and genetic influences of health will be analyzed and applied for health promotion, person-centered care, and population health.

NUR506 Communication and Collaboration for Leadership (3)
This course will focus on student development, analysis and application of skills to support communication and interprofessional collaborative partnerships. Theories are incorporated to enhance health care outcomes within diverse populations. Foundational values for nursing will underpin support for quality and safety of care, self-care initiatives and sustainment of professional growth.

NUR507 Health Policy and Advocacy for Quality Care (3)
In this course, students analyze and create innovative approaches to complex issues in health care. Concepts of policy and advocacy are integrated to address social justice, and diversity, equity, and inclusion as applied to the delivery of quality care. Nursing leader influence on fostering healthy work environments will be explored.

NUR630 Business Management in Health Care (3)
This course focuses on healthcare finance, budgeting, and business concepts needed to prepare the nurse leader to function in a variety of healthcare settings.

NUR632 Curriculum Design and Evaluation in Nursing Education (3)
This course focuses on the nurse educator's role in curriculum development, curriculum evaluation, measures of student performance, accreditation, and the implementation of these concepts in nursing education.

NUR640 Human Resource Management in Health Care (3)
This course focuses on current practices in human resources that directly impact nurse leaders. Topics will include staffing needs, labor laws, recruitment, hiring, and retention; onboarding practices, staff development, conflict resolution, relationship management, diversity, managing a multigenerational workforce, and business ethics.

NUR642 Nurse Educator Role Development (3)
This course focuses on diverse roles of nurse educators in various practice and educational environments. The course will provide novice and experienced nurse educators knowledge on developing an effective learning environment for a diverse student population. Educator responsibilities outside of the classroom will also be explored.

NUR650 Leadership for Quality and Safety in Health Care (3)
This course builds on the foundations of management, leadership, and business theory. Emphasis will be placed on quality and safety, performance improvement, and strategic management strategies for leading complex healthcare organizations, especially during times of change or crisis, while ensuring equitable quality care.

NUR651 Database Management for Evidence-based Decision making (3)
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.

NUR652 Teaching Strategies and Technology for the Nurse Educator (3)
This course focuses on strategies to develop knowledge and skill sets in pedagogy, teaching-learning theories, and technologies that can be utilized in various educational settings. Students will collate resources into a toolbox of teaching strategies to put into use as an educator.

NUR660C Health Care Leadership Practicum (3)
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.

NUR660D Health Care Leadership Practicum (4)
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.

NUR661 Health Care Informatics Practicum (3)
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.

NUR662 Healthcare Education Practicum (3)
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.

NUR670C Healthcare Leadership 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.

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.

NUR673 Professional Role Practicum (6)
During the culminating course, students will operationalize previously learned program content through both course learning assignments and a precepted practice experience. Emphasis is placed on professionalism and transition to the advanced practice nursing role.

NUR693A Independent Study (1)
Prerequisite: Permission of Instructor

NUR693B Independent Study: (2)
Prerequisite: Permission of Instructor

NUR693C Independent Study: (3)
Prerequisite: Permission of Instructor

NUR697A Nursing Practice Experience (1)
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.

NUR697B Nursing Practice Experience (2)
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.

NUR697C Nursing Practice Experience (3)
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.

NUR700 Structure and Application in Nursing Knowledge (3)
This course introduces the advanced practice nurse to contemporary nursing knowledge, as formalized through concepts, theories and frameworks guiding clinical practice. There is also emphasis on the development and structure of knowledge.

NUR702 Developing Evidence-Based Practice (3)
This course prepares students with the skills and competencies needed to assimilate knowledge for scholarly work. Emphasis is focused on the identification of a clinical problem and finding the best evidence for an intervention from established research studies to support a practice change project.

NUR703 Population Health, Ethics, and Health Policy (3)
This course focuses on population health, ethical issues, and public policy in healthcare. Students apply strategies to manage ethical dilemmas, expand advocacy beyond the patient to include the community, and analyze health policy to educate and lead change to promote population health.

NUR704 Translating Evidence to Advance Best Practice (3)
This course focuses on translating evidence to improve practice and promote optimal patient-centered outcomes. Emphasis is placed on responsible, safe, and ethical decisionmaking to lead and plan evidence-based system change for diverse populations while collaborating with interprofessional teams. Human subject protection will also be explored.
Prerequisites: NUR700 ***and*** *NUR702*

NUR705 Financial Management and Dissemination of Evidence-Based Practice (3)
This course explores foundational elements of financial management and dissemination of evidence-based practice for nurses in advanced practice roles. Emphasis will be placed on building business acumen for systems-based care and advancing nursing scholarship to promote a culture of quality and safety to enhance nursing practice and transform healthcare.
Prerequisite: NUR707

NUR706 Advanced Nursing Leadership in Healthcare Systems (3)
This course focuses on organizations, decision-making and managing change. Organizational, Change, and Leadership theories and their application to complex systems are analyzed. Emphasis is placed on impacting performance, communication, interprofessional collaboration, and culture across the continuum and in times of crisis while promoting equitable, innovative, safe, and cost-effective care.

NUR707 Technology and Informatics for Advanced Practice Nursing (3)
This course focuses on the advanced practice nurse's role in understanding and using information technology to promote safe, quality, and ethical care delivery across the healthcare continuum. Use of technology and data analysis to inform decision-making, lead inter-professional teams, and communicate with patients will also be explored.

NUR799 Implementing and Evaluating Evidence-Based Practice (6)
This course provides an opportunity for the advanced practice nurse leader to implement, evaluate and disseminate a planned evidence-based practice project using the knowledge and competencies acquired throughout the program. The impact on healthcare delivery systems, health policy, and patient-centered outcomes for diverse populations are also explored.
Prerequisite: NUR707

OTD: OCCUPATIONAL THERAPY

OTD733 Global Health Perspectives: A Field Experience (2)
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 the sustainability of their service.

OTD740 Occupational Science (3)
Professional students examine landmark occupational science literature and apply learned concepts of human nature and meaningful occupation to observation exercises within their practice focus.

OTD741 Evidence-Based Practice (3)
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.

OTD742 Advanced Practice Concepts and Skills (3)
Students apply The Occupational Therapy Practice Framework: Domain and Process 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.

OTD750 Occupational Therapist as Entrepreneur (3)
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.

OTD751 Capstone Project Design (3)
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).
Prerequisite: OTD741

OTD752 Education Theory and Technology (3)
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.

OTD760 Leadership and Professionalism (3)
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.

OTD761 Proposal Development (1)
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.
Prerequisites: OTD741 ***and*** *OTD751*

OTD766 Methods of Evaluation (3)
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.

OTD772 Capstone Implementation and Evaluation (5)
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. *Prerequisites: OTD741, OTD751, **and** OTD761*

OTD791 Independent Study (1)
Prerequisite: Permission of Instructor

OTD792 Independent Study (2)
Prerequisite: Permission of Instructor

OTH601 Foundations of Occupation & Wellness (3)
This course introduces the concepts of occupational therapy including the power of occupation and the influence of occupation on wellbeing. Additional topics addressed include professional memberships and documents that guide our practice, therapeutic use of self, cultural competency and Justice Equity Diversity and Inclusion (JEDI), and teamwork in various settings.

OTH605 Mental Health & Occupational Performance (4)
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.

OTH606 Functional Anatomy and Kinesiology (2)
Students acquire foundations of human anatomy and the kinesiology of movement. Emphasis is in the analysis of musculoskeletal and movement factors and the impact of biomechanical conditions on occupational performance and the impact of biomechanical conditions. Students acquire skills in clinical examination of movement and the musculoskeletal system.

OTH606L Functional Anatomy and Kinesiology Lab (1)
With a foundational understanding of human anatomy and the kinesiology of movement. Students will demonstrate skills in clinical examination of movement and the musculoskeletal system. Experiential learning through hands-on labs and case application reinforces theoretical knowledge.

OTH610 Advanced Topics in Occupational Therapy (2)
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.

OTH612 Evidence-based Practice I (2)
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.

OTH620 Teaching & Learning in Occupational Therapy (2)
Students will investigate and identify their learning preferences to apply teaching and learning strategies to their classes and clients in professional settings. Learning theories and instructional design principles application will assist in developing objectives and learning experiences for stakeholders. Students will apply technology skills used in the teaching-learning environment.

OTH622 Occupational Performance in Children & Adolescents (4)
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.

OTH623 Occupational Performance in the Aging Population (4)
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.

OTH624 Biomechanics & Occupational Performance (4)
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.

OTH626 Occupational Therapy Models of Practice & Occupational Science (3)
Theoretical practice models and frames of reference that guide occupational therapy evaluation and intervention are introduced and explored. Occupational science concepts are introduced and applied. Students analyze and relate pertinent occupation therapy literature and case studies to models of practice and occupational science.

OTH629 Quantitative Research in OT (2)
This course teaches students to appraise quantitative research to inform clinical decision making. Students also acquire fundamental knowledge of quantitative study design and data analysis used in occupational therapy scholarship.

OTH632 Environmental Interventions (1)
This course introduces assistive technology principles and practice. Students will critique a variety of technology resources, assess environments, and apply technological information to assessment and intervention. Students will be able to critically discuss the impact of environmental interventions on the consumer's ability to engage in work/school, self-care, and play/leisure pursuits.

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.

OTH635 Pediatric Fieldwork I-A & Seminar (1)
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.

OTH636 Adult Fieldwork I-B & Seminar (1)
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.

OTH638 Functional Neuroscience for OT (2)
This course emphasizes the neuroscientific underpinnings of human occupation. Concepts of human neurobehaviors, neuroanatomy, and neurophysiology will be discussed as they relate to the assessment of client factors, performance skills, and performance patterns, and participation.

OTH638L Functional Neuroscience for OT Lab (1)
This lab-based course complements the functional neuroscience lecture. The emphasis is in the practical application of the assessment of neurobehaviors and the impact of neurological conditions on client factors, performance skills, and performance patterns, occupational performance and participation.

OTH639 Outcomes and Knowledge Translation (3)
Students will learn the application of outcome measures and their application to knowledge translation. Students explore merits and biases intrinsically present within measurement, and gain a broad perspective of outcome methods and measures applied in the context of service delivery.

OTH640 Degenerative Neurological Conditions (2)
This course provides a comprehensive understanding of degenerative neurological conditions, their clinical manifestations, and their impact on occupational performance. Students acquire knowledge of the OT process and evidence-based practice in assessing, evaluating, planning, and implementing client-centered interventions with degenerative neurologic conditions.

OTH640L Degenerative Neurological Conditions Lab (1)
This lab-based course complements OTH640 lecture with a focus on the application of the OT process on degenerative neurological conditions. Students will develop the skills to conduct assessments and interventions based on theory and evidence for clients with degenerative neurological conditions.

OTH641 Neurological Conditions & Occupational Performance (4)
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.

OTH644 Community FW1-C & Seminar (1)
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. The program plan is implemented and evaluated by OT faculty and the community-based site.

OTH645 Professional Leadership & Management (3)
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)
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.

OTH647 Assistive Technology (1)
This course surveys assistive technology principles, practice, and the role of the occupational therapist as a member of the assistive technology team. Legal, ethical, and social issues related to assistive technology application will be addressed. Students will critique a variety of technological resources and apply them to the OT process.

OTH648 Qualitative and Mixed Methods Research in OT (2)
This course teaches students to appraise qualitative and mixed-methods research to inform clinical decision making. Students also acquire fundamental knowledge of qualitative and mixed methods study design and data analyses used in occupational therapy scholarship.

OTH660 Fieldwork II Seminar (1)
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.

OTH662 Fieldwork Level II-A (12)
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.

OTH665 Fieldwork Level II-B (12)
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.

OTH665I Fieldwork Level II B, Part One (4)
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.

OTH665II Fieldwork Level II B, Part Two (8)
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.

OTH690 Introduction to Evidence-Based Practice for Occupational Therapists (3)
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.

OTH695 Models of Practice in Occupational Therapy (3)
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.

OTH705 Psychosocial Topics in OT (1)
This course teaches students to identify, develop, and implement individual and population-based OT group interventions with a focus on psychosocial issues using OT Clinical Skill Competencies, and Sustainable Health & Wellbeing principles. Students will also demonstrate Practice Scholar Competencies by incorporating evidence-based support for their course assignments.

OTH705L Psychosocial Topics in OT Lab (1)
This course complements OTH705 and runs concurrently with Fieldwork 1C: Community Fieldwork. This lab course focuses on the implementation and outcomes of intervention techniques that address psychosocial aspects of occupations for individualized, group, and populations.

OTH707 Introduction to Doctoral Capstone (3)
This course introduces students to the Doctoral Capstone. Students' complete needs assessments with capstone sites, determine the project question, and complete part of the literature review. Through a series of assignments students will begin the capstone experience.

OTH715 OT in Advanced Practice (1)
This elective course provides the opportunity to gain more depth in a specialized or more advanced area of clinical practice in occupational therapy in traditional or non-traditional settings. Students acquire knowledge of how to obtain advanced certifications and/or specialization, emphasizing the value of lifelong learning.

OTH722 Pediatric Occupations across Practice Settings (1)
This course provides an in-depth exploration of childhood occupations, and the interrelationship among the child, occupational performance and participation, and the environment. Students learn specialized roles including sensory processing and feeding, across outpatient, community-based, and hospital-based settings. Alternative delivery models such as teletherapy and consultation will be explored.

OTH722L Pediatric Occupations across Practice Settings Lab (1)
This lab supports OTH722 in the application of specialized roles in addressing sensory processing and feeding. Specific practices in outpatient, home-based, community-based, and hospital-based settings will be reinforced.

OTH723 Occupational Performance in the Aging Population (4)
This course examines the normal aging process and age-related conditions emphasizing occupational performance, activity limitation, and participation restrictions of individuals throughout adulthood. 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.

OTH723L Occupational Performance in the Aging Population Lab (1)
This lab-based course integrates knowledge of normal aging and age-related conditions in the understanding of occupational performance, activity limitations, and participation restrictions. Students acquire the skills to conduct evaluation and intervention strategies, including prevention, compensation, remediation, and maintenance of wellness.

OTH724 Biomechanics of Human Occupation (3)
Lecture provides knowledge of biomechanics, tissue healing, and the neurological bases of occupations.? Students acquire skills to conduct comprehensive evaluations and interventions to prevent, remediate, or compensate for biomechanical impairments, limitations, or restrictions. Topics include orthopedic conditions and impairments, manual therapy, physical agents, complementary methods, orthotics, ergonomics, and patient education.

OTH724L Biomechanics of Human Occupation Lab (1)
This lab integrates knowledge of biomechanics, tissue healing, and the neurological bases of occupations. Students acquire the skills to conduct comprehensive evaluations and interventions to prevent, remediate, or compensate for biomechanical impairments, limitations, or restrictions. Topics include therapeutic exercises, manual therapy, physical agents, complementary methods, orthotics, ergonomics, and patient education.

OTH726 Pediatric Occupational Development and School-based Practice (3)
This course addresses the occupational development of children and adolescents, and the interrelationship between the child, occupation, and environment on occupational performance and participation. Students explore childhood occupations, models and frames of reference, and evaluation and intervention in schools.

OTH738 Doctoral Capstone Project Development I (3)
In this course, students will continue to prepare for the Capstone Project by finalizing the Site Description, completing the Literature Review, and identifying the unique occupational therapy lens that the project will hold.
Prerequisite: OTH707

OTH741 Acquired Neurological Conditions (4)
This course provides a comprehensive understanding of acquired neurological conditions, their clinical manifestations, and their impact on occupational performance. Students acquire knowledge of the OT process and evidence-based practice in assessing, evaluating, planning, and implementing client-centered interventions with acquired neurologic conditions.

OTH741L Acquired Neurological Conditions Lab (1)
This lab-based course complements OTH 741 lecture with a focus on the application of the OT process on acquired neurological conditions. Students will develop the skills to conduct assessments and interventions based on theory and evidence for clients with acquired neurological conditions.

OTH747 Leadership and Professional Identity (1)
This course reinforces the curriculum's leadership and professional identity thread and provides students with resources and skills to support their professional development post-graduation. Students become familiarized with topics related to certification exam success, job skills, stress management techniques, state licensure, and post-graduate certifications and specializations.

OTH748 Doctoral Capstone Project Development II (1)
In this course, students will continue to prepare for the Capstone Experience and the Capstone Project by completing, submitting, and obtaining approval from the IRB. Focus will be on development of project objectives, project design and methods of evaluation based on current best evidence.
Prerequisite: OTH738

OTH762 Fieldwork II-A (10)
The first Level II fieldwork course includes a minimum of 12 weeks in a practice setting that provides occupational therapy services. Students are provided with experience in client evaluation, intervention, documentation, problem-solving, and

professionalism. Students are supervised by qualified occupational therapists with a minimum of one year of experience.

OTH765 Fieldwork II-B (10)
The second Level II fieldwork course includes a minimum of 12 weeks in a practice setting that provides occupational therapy services. Students are provided with experience in client evaluation, intervention, documentation, problem-solving, and professionalism. Students are supervised by qualified occupational therapists with a minimum of one year of experience.

OTH767 Integrated Occupational Science (3)
Students explore occupational science to promote in-depth understanding of occupation as scientifically based and integral 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.

OTH778 Outcome Methods and Measures (3)
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.
Prerequisite: OTH646

OTH780 Education Theory and Instructional Design (3)
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.
*Prerequisites: OTH665 **or** both OTH665I and OTH665II **and** OTH662*

OTH790 Doctoral Capstone (12)
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 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.
Prerequisite: OTH748

OTH795 Doctoral Dissemination (2)
In this course, students disseminate the findings from their 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.
Prerequisite: OTH748

OTH800 Graduate Continuing Credit (1)

PAS: PHYSICIAN ASSISTANT STUDIES

PAS600 Essentials for the PA I (9)
his course employs a problem based approach to primary and specialty care medicine, emphasizing self-directed learning. It encompasses medical diagnosis and management, including pharmacotherapeutics, psychosocial assessment, patient education, and disease and disability prevention.

PAS601 Essentials for the PA II (9)
This course employs a problem based approach to primary and specialty care medicine, emphasizing self-directed learning. It encompasses medical diagnosis and management, including pharmacotherapeutics, psychosocial assessment, patient education, and disease and disability prevention.
Prerequisite: PAS600

PAS602 Clinical Application of Basic Sciences I (4)
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.

PAS603 Clinical Application of Basic Sciences II (4)
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.
Prerequisite: PAS602

PAS606 Clinical Pharmacology I (2)
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.

PAS607 Clinical Pharmacology II (2)
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.
Prerequisite: PAS606

PAS612 Introduction to the PA Profession (1)
This course introduces the students to the PA profession and the role of a PA in the US 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.

PAS613 Critical Reading of the Literature (1)
Students critically evaluate medical literature and resources including research design, data collection and statistical analysis. The goal of this course is to prepare students to effectively use published studies and guidelines in clinical practice to guide clinical decision-making in an evidence-based manner.

PAS614 Medical Ethics (1)
Contemporary professional medical ethics issues are discussed and debated. Instruction is provided through classroom discussions, guest lectures, and small group discussions/presentations.

PAS617 Clinical Procedures (2)
Laboratory course covering theory and application of common clinical procedures that a PA will encounter during supervised clinical practice experiences (SCPEs) and clinical practice. Students demonstrate foundational competence through practical evaluations.

PAS629 Summative Evaluation (1)
Drawing on skills and knowledge that has been acquired throughout the curriculum, students complete the summative evaluation necessary for graduation. Students complete case presentations, medical knowledge assessments, a clinical & technical skills assessment, and a problem-focused OSCE (Objective Structured Clinical Examination).

PAS620 Introduction to Clinical Experience I (2)
Part 1 of 3. This course will cover concepts necessary for the clinical aspect of the curriculum, including, but not limited to, medical documentation, appropriate medical terminology use, HIPAA, OSHA, universal precautions, and professional comportment.

PAS621 Introduction to Clinical Experience II (1)
Part 3 of 3. This course will cover concepts necessary for the clinical aspect of the curriculum, including, but not limited to, medical documentation, appropriate medical terminology use, billing and coding, recognition of impairment, and prevention of burnout. Orientation to processes and procedures for clinical experiences will be included.

PAS622 Introduction to Clinical Experience III (1)
Part 2 of 3. This course will cover concepts necessary for the clinical aspect of the curriculum, including, but not limited to, medical documentation, appropriate medical terminology use, clinical site requirements, and professional comportment.

PAS630 Topics in Clinical Medicine (4)
An intensive review in preparation for entering practice as a PA. A series of special seminars and presentations that provides the student with a topical approach to medicine.

PAS635 Healthcare Policy (1)
This course provides an in-depth review of current healthcare law and policy issues impacting the PA profession and US healthcare delivery system at the local, state, and federal level.

PAS636 Program to Practice (1)
This course assists students with the transition from student to clinically practicing PA. The course provides information on how to prepare for the new career, including, but not limited to, national certification, state licensure, malpractice insurance, credentialing, burnout, and clinician impairment.

PAS637 Clinical Skills for the PA I (4)
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.

PAS638 Clinical Skills for the PA II (4)
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.
Prerequisite: PAS637

The following Clinical Experiences are 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.

Prerequisites apply to ALL of the clinical experiences
*Prerequisites: PAS601, PAS603, PAS607, PAS617, PAS622, **and** PAS638*

PAS640 Clinical Experience I (3)

PAS641 Clinical Experience II (3)

PAS642 Clinical Experience III (3)

PAS643 Clinical Experience IV (3)

PAS644 Clinical Experience V (3)

PAS645 Clinical Experience VI (3)

PAS646 Clinical Experience VII (3)

PAS647 Clinical Experience VIII (3)

PAS648 Clinical Experience IX (3)

PAS651 Advanced Clinical Medicine I (1)
This course enhances student knowledge and proficiency in topics related to patient-centered care in PA practice. Professional issues and DEI topics introduced in the first year of the program will be addressed with increased complexity. This course runs concurrently with supervised clinical practice experiences.

PAS652 Advanced Clinical Medicine II (1)
This course allows students to enhance knowledge related to inpatient & emergency medicine by reinforcing complex topics introduced in the first year of the program. The goal of the course is to enable students to become more proficient in inpatient & emergency medicine topics common to the PA profession. This course runs concurrently with supervised clinical practice experiences.

PAS653 Advanced Clinical Medicine III (1)
This course enhances student knowledge and proficiency in topics related to outpatient medicine in PA practice. Concepts introduced in the first year of the program are reinforced with increased complexity including professional practice, clinical reasoning and intervention, and advanced pharmacology. This course runs concurrently with supervised clinical practice experiences.

PAS654 Advanced Clinical Medicine IV (1)
This course enhances student knowledge and proficiency in topics related to public health and prevention in PA practice. Concepts introduced in the first year of the program are reinforced with increased complexity including professional practice, genetics, and advanced pharmacology. This course runs concurrently with supervised clinical practice experiences.

PAS691 Independent Study (1)

PAS692 Independent Study (2)

PAS693 Independent Study (3)

PAS800 Continuing Graduate Credit (1)

PED: PHYSICAL EDUCATION

PED100 Special Topics (1)
PED special topics courses offer students a variety of exercise opportunities by incorporating the latest trends in the fitness field.

PED102 Varsity Sports Level I (1)
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.

PED103TC2 Weight Training Level I (1)
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.

PED106 Flag Football Level I (1)

PED107 Body Dynamics Level I (1)
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.

PED108 Yoga and Relaxation Level I (1)
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.

PED113 Hip Hop Dance Level I (1)
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.

PED114 Contemporary Dance Level I (1)
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.

PED115 Squash Level I (1)
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.

PED123 Indoor Soccer Level I (1)
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.

PED124 Beginning Boxing Level I (1)
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.

PED126 Oriental Sword Level I (1)
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.

PED127 Latin Dance Extravaganza Level I (1)
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.

PED141 Walking for Fitness Level I (1)
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.

PED145 Zumba Level I (1)
This course provides stimulating dance 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.

PED155 Swimming Level I (1)
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.

PED158 Scuba Level I (1)
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.

PED170 Whitewater Kayaking Level I (1)
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.

PED190 Health and Wellness Studies Level I (1)
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.

PED202 Varsity Sports Level II (1)
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.
*Prerequisite: PED102 **or** PED102*

PED203 Weight Training Level II (1)
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.

PED206 Flag Football Level II (1)
Prerequisite: PED106

PED207 Body Dynamics Level II (1)
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.
Prerequisite: PED107

PED208 Yoga and Relaxation Level II (1)
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.
Prerequisite: PED108

PED213 Hip Hop Dance Level II (1)
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.
Prerequisite: PED113

PED214 Contemporary Dance Level II (1)
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.
Prerequisite: PED114

PED215 Squash Level II (1)
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.
Prerequisite: PED115

PED223 Indoor Soccer Level II (1)
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.
Prerequisite: PED123

PED224 Beginning Boxing Level II (1)
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.
Prerequisite: PED124

PED226 Oriental Sword Level II (1)
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.
Prerequisite: PED126

PED227 Latin Dance Extravaganza Level II (1)
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.
Prerequisite: PED127

PED241 Walking for Fitness Level II (1)
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.
Prerequisite: PED141

PED245 Zumba Level II (1)
This course provides stimulating dance 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.
Prerequisite: PED145

PED255 Swimming Level II (1)
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.
Prerequisite: PED155

PED258 Scuba Level II (1)
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.
Prerequisite: CPED158

PED270 Whitewater Kayaking Level II (1)
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.
Prerequisite: PED170

PED290 Health and Wellness Studies Level II (1)
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.
Prerequisite: PED190

PED491 Independent Study (1)
Prerequisite: Permission of Instructor

PED492 Independent Study (2)
Prerequisite: Permission of Instructor

PHI: PHILOSOPHY

PHI113 Introduction to Philosophy (3)
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.

PHI121 Introduction to Logic (3)
An introduction to critical thinking, induction, deduction, and contemporary symbolic logic including argument symbolization, proof construction, and truth tables.

PHI210 Biomedical Ethics (3)
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.

PHI213 Special Topics (3)

PHI218 Ethics and Women's Issues (3)
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.

PHI225 Environmental Ethics (3)
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.

PHI241 Love, Sex, and Friendship (3)
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.

PHI300 Womanist and Liberation Theology (3)
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.
Prerequisite: ENG105

PHI301 Biomedical and Research Ethics (3)
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.

PHY: PHYSICS

PHY151 Fundamentals of Physics I (3)
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.

PHY152 Fundamentals of Physics II (3)
This is the second course in an algebra-based sequence. Topics include electricity and magnetism, circuits, sound, optics, and relativity.
Prerequisite: PHY151

PHY155L Fundamentals of Physics Laboratory I (1)
An algebra-based exploration of the experimental techniques of classical physics, with applications to mechanics.
Corequisite: PHY151

PHY156L Fundamentals of Physics Laboratory II (1)
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.
Corequisite: PHY152

PHY251 Principles of Physics I (4)
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.
Prerequisite: MTH151

PHY252 Principles of Physics II (4)
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.
Prerequisite: PHY251

PHY255L Physics Laboratory I (1)
Experimental techniques of classical mechanical physics. Three hours of laboratory per week. Additional Fee(s): Laboratory fee.
Co-rerequisite: PHY251

PHY256L Physics Laboratory II (1)
Experimental techniques of classical physics with applications to electricity, magnetism, sound, and optics. Three hours per week. Additional Fee(s): Laboratory fee.
Co-rerequisite: PHY252

PHY490 Integrative Capstone (3)
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.

PHY492 Independent Study (2)
Prerequisite: Permission of Instructor

PHY498 Tutorial: Physics (4)

PHY499 Tutorial: Physics (4)

POL: POLITICAL SCIENCE

POL100 Introduction to Comparative Politics (3)
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.

POL101 American Government and Public Policy (3)
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.

POL104 Introduction to International Relations (3)
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.

POL202L Public Policy Analysis Field Experience (2)
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.
Prerequisite: POL202W

POL202W Understanding Public Policy (3)
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.
*Prerequisite: GOV101 **or** POL101*

POL213 Special Topics (3)

POL217 European Identities (3)
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.

POL219W International Organizations (3)
This course examines the role of international organizations in world politics, including how and why the network of organized international institutions developed and what they contribute to managing such issues as military conflict, political change, and economic stability.
*Prerequisite: POL100 **or** POL104*

POL229 Campaigns and Elections (3)
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.
Prerequisite: POL101

POL230 Civic Engagement (3)
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.
Prerequisite: POL101

POL234 Non-Profits and Policy Activism (3)
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.

POL246 State and Local Government (3)
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.
Prerequisite: POL101

POL262 Women and Politics (3)
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.
Prerequisite: POL101

POL268 Environmental Policy (3)
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.

POL270 Special Topics: Applied Politics and Policy (1)
This course is intended to augment the political science 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.
Prerequisite: Permission of Instructor

POL300 The U.S. Congress (3)
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.
Prerequisite: POL101

POL302 Ethnic Conflict (3)
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.
*Prerequisite: POL100 **or** POL104*

POL303 Constitutional Law I: US Govt Powers/Relationships (3)
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.
Prerequisite: POL101

POL311W Selected Topics in Social Science Research (3)
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.

POL313 Special Topics (3)

POL319 Politics of the European Union (3)
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.

POL320 Politics of the Former Soviet Union (3)
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.
Prerequisite: POL100

POL324 U.S. Foreign Policy (3)
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.
Prerequisite: POL104

POL340 Political Psychology (3)
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.
*Prerequisite: POL101 **or** PSY101*

POL490 Integrative Capstone (3)
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.
*Prerequisite: POL311**or** POL311W*

POL491 Independent Study (1)
Prerequisite: Permission of Instructor

POL493 Independent Study (3)
Prerequisite: Permission of Instructor

POL498 Tutorial: Political Science (4)

POL499 Tutorial: Political Science (4)

PSY: PSYCHOLOGY

PSY101 General Psychology (3)
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.

PSY152 Human Growth and Development (3)
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.

PSY206 Infant Mental Health (3)

PSY210 Psychology of Eating (3)
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.
Prerequisite: PSY101

PSY211 PAAR Training in Sexual Assault Counseling (3)
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.

PSY213 Statistics and Research Design (3)
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.
Prerequisite: PSY101

PSY215 Theories of Counseling and Psychotherapy (3)
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.
Prerequisite: PSY101

PSY217W Critical Thinking in Psychology (3)
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.
Prerequisite: PSY101

PSY225 Death and Dying (3)
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.
*Prerequisite: PSY101 **or** SWK101*

PSY230 Animal Behavior (3)
A general introduction to the study of animal behavior from evolutionary and sociobiological perspectives. Emphasis is on social behaviors and interactions.
Prerequisite: PSY101

PSY236 Psychology of Gender and Sexuality (3)
This course is an introduction to psychological, social, and cultural aspects of sexual orientation and gender identity, with an emphasis on examining sexual orientation and gender identity from a psychological perspective. Topics will include historical perspectives on sexual orientation and gender identity and basic research methods.
Prerequisite: PSY101

PSY243 Health Psychology (3)
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.
Prerequisite: PSY101

PSY251 Human Growth and Development (3)
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.

PSY307 Cognitive Psychology (3)
A survey of theories and research concerned with human cognitive processes. Topics include attention, memory, problem solving, and concept formation.
Prerequisite: PSY101

PSY313 Special Topics in Psychology (3)
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.
Prerequisite: PSY101

PSY314W Foundations of Behavioral Research (3)
This course examines the scientific method employed by social scientists. Topics include types of variables, validity and reliability, research ethics, experimentation, and field research. Students will conduct research and write scientific papers in areas of social science.
Prerequisite: PSY213

PSY323 Personality (3)
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.
Prerequisite: PSY101

PSY324 Motivation (3)
A survey of concepts and data related to the arousal and direction of behavior.
Prerequisite: PSY101

PSY326 Learning and Memory (3)
This course provides an overview of the principles and research associated with learning and memory. Topics include classical conditioning, operant learning, reinforcement theory, memory systems, and memory processes. This course will emphasize the interaction of biological and environmental variables in the operations of learning and memory.
Prerequisite: PSY101

PSY328 Sensation and Perception (3)
An overview of the sensory systems and perceptions mediated by these systems. Topics include physiological and psychophysical methods, vision, object and scene perception, visual attention, the effects of action on perception, motion perception, color perception, depth and size perception, hearing, music perception, speech perception, the cutaneous senses, and the chemical senses.
Prerequisite: PSY101

PSY331 Social Psychology (3)
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.
Prerequisite: PSY101

PSY333 Fundamentals of Psychopathology (3)
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.
Prerequisite: PSY101

PSY340 Psychopharmacology (3)
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.
Prerequisite: PSY101

PSY341 Psychobiology (3)
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.
Prerequisite: PSY101

PSY342 Addiction (3)
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.
Prerequisite: PSY101

PSY351 Childhood and Adolescence (3)
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.
Prerequisite: PSY101

PSY352 Adult Development (3)
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.
Prerequisite: PSY101

PSY356 Forensic Psychology (3)
This course examines the broad interdisciplinary field of forensic psychology. Students will learn how psychology is applied to the criminal justice system, including in the evaluation of both law enforcement officers and criminal offenders, as well as how psychology informs criminal investigations, legal processes, and corrections.
*Prerequisite: PSY101 **or** CRM101*

PSY357 Adolescence & the Transition to Adulthood (3)
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.
Prerequisite: PSY101

PSY357W Adolescence & the Transition to Adulthood (3)
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.
Prerequisite: PSY101

PSY362 What is Evil? (3)
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."
*Prerequisite: CRM101 **or** PSY101*

PSY367 Theories and Practices in Art Therapy (3)
This course introduces students to the development of the theoretical approaches, historical bases, and practices of the field of art therapy. Students will explore self-

expression in the form of interactive art experientials and utilize visual art methods and materials to examine the relationship of the creative process to the psychological and emotional self.
Prerequisite: PSY101

PSY395 History of Psychology (3)
This course provides a history of psychology from its roots in ancient Greek philosophy, through the Renaissance and development of modern science, and through several schools and paradigms within modern psychology such as structuralism, functionalism, psychoanalysis, behaviorism, psychobiology, humanistic psychology, and cognitive psychology.
Prerequisite: PSY101

PSY401 Individual Research (1)
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.
*Prerequisites: PSY101, PSY213, **and** PSY314W*

PSY402 Individual Research (2)
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.
*Prerequisites: PSY10, PSY213, PSY314W, **and** permission of the instructor*

PSY403 Individual Research (3)
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): Psychology 101, 213, 214, and permission of the instructor.
*Prerequisites: PSY10, PSY213, PSY314W, **and** permission of the instructor*

PSY430 Introduction to Sport and Exercise Psychology (3)
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.
Prerequisite: PSY101

PSY490 Integrative Capstone (3)
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.
*Prerequisites: PSY213 **and** PSY314W*

PSY491 Independent Study (1)
Prerequisite: Permission of Instructor

PSY492 Independent Study (2)
Prerequisite: Permission of Instructor

PSY493 Independent Study (3)
Prerequisite: Permission of Instructor

PSY494 Independent Study (4)
Prerequisite: Permission of Instructor

PSY501 Foundations of Counseling Psychology (3)
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)
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.

PSY506 Essentials of Infant Mental Health (3)
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.

PSY509 Infant Development (3)
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.

PSY510 Infant-Toddler Assessment (3)
This course will provide students with an introduction and hands on experience completing developmental assessment of infants 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.

PSY511 PAAR Training in Sexual Assault Counseling (3)
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.

PSY512 Practices & Principles of Infant Mental Health Int (3)
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.
*Prerequisites: PSY506 **and** PSY509*

PSY514 Infant Attachment: A Dual Relationship (3)
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.
Prerequisite: PSY629

PSY515 Human Sexuality (3)
This course draws from current research to examine biological, psychological, and social aspects of sexuality. In addition, issues relating to sexuality for parents and educational and counseling professionals will be addressed.

PSY516 The NICU Experience (3)
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.
*Prerequisites: PSY506 **and** PSY509*

PSY518 Family Interactions (3)
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.
*Prerequisites: PSY506 or PSY506N **and** one of the following: PSY509, PSY509E, or PSY509N*

PSY530 Introduction to Sport and Exercise Psychology (3)
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.

PSY555 Statistics and Research Methods (3)
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.

PSY602 Sport and Exercise Psychology Interventions (3)
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.

PSY605 Biopsychology (3)
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.

PSY617 Psychology of Culture and Identity (3)
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.

PSY621 Advanced Seminar in Diversity Issues (3)
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.

PSY627 Vocational Career Counseling (3)
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)
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.

PSY632 Positive Psychology (3)
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.

PSY635 Concepts of Mental Health and Illness (3)
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.

PSY642 Assessment (3)
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.

PSY645 Environmental Psychology (3)
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.

PSY646 Intergroup Dialogue Facilitation Training (3)
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.

PSY647 Intergroup Dialogues: (3)
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.

PSY653 Reflective Observation (3)
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.
*Prerequisites: PSY506, PSY509, PSY510, **and** PYS512*

PSY655 Reflective Consultation I (3)
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.
*Prerequisites: PSY506, PSY509, PSY510, **and** PYS512*

PSY656 Reflective Consultation II (3)
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.
*Prerequisites: PSY506, PSY509, PSY510, **and** PYS512*

PSY657 Psychopathology & Resilience (3)
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)
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.

PSY660 Counseling Theories and Techniques I (3)
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.

PSY661 Counseling Theories and Techniques II (3)
The course presents the following approaches to counseling: 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 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.

PSY674 Foundations of Family Therapy (3)
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.

PSY676 Counseling Children and Adolescents (3)
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)
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 (3)
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.

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.
Prerequisite: PSY682

PSY687 Advanced Internship I (3)
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.

PSY691 Independent Study (1)
Prerequisite: Permission of Instructor

PSY692 Independent Study (2)
Prerequisite: Permission of Instructor

PSY693 Independent Study (3)
Prerequisite: Permission of Instructor

PSY706 History of Psychology (3)
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.

PSY707 Social Psychology (3)
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.

PSY708 Cognitive & Affective Bases of Behavior (3)
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 inhuman activities will be examined. Affect will be examined through review of early attachment relationships, emotional regulation, and social-emotional processes.

PSY709 Intellectual Assessment (3)
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.

PSY710 Foundations of Psychological Interventions (3)
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.

PSY711 Multicultural & Diversity Issues in Counseling Psych (3)
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.

PSY712 Advanced Research Design (4)
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)
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)
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)
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.

PSY718 Psychology and Sustainability (3)
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.

PSY720 Neuropsychological Assessment (3)
This course focuses on the construct of brain-based behavior, including the measures used to asses 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.
*Prerequisites: PSY709 **and** PSY716*

PSY730 Psychology of Emerging Adulthood (3)
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.

PSY741 Pre-Practicum (3)
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.

Practicum I 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.

PSY746 Practicum I (3)

PSY746A Practicum I (1)

PSY746B Practicum I (2)

PSY746C Practicum I (3)

Practicum II 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.

PSY750A Practicum II (1)

PSY750B Practicum II (2)

PSY750C Practicum II (3)

PSY780 Professional Seminar in Counseling Psychology (3)
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.

PSY800 Graduate Continuing Credit (1)

PSY801 Family-Focused Systemic Interventions (3)
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.

PSY804 Vocational Issues in Counseling Psychology (3)
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.

PSY805 Group Processes and Interventions (3)
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.

PSY806 Supervision and Leadership (3)
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.

PSY809 Advanced Developmental Psychology (3)
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.

PSY810 Advanced Data Analysis (4)
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

PSY814 Psychopathology, Resilience, and Evidence-Based Practice (3)
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.

PSY815 Organizations, Communities, and Consultation (3)
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)
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.

PSY831 Independent Study (1)
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.
Prerequisite: Permission of Instructor

PSY832 Independent Study (2)
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.
Prerequisite: Permission of Instructor

Practicum III 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.

PSY840A Practicum III (1)

PSY840B Practicum III (2)

PSY840C Practicum III (3)

Practicum IV 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.

PSY841A Practicum IV (1)

PSY841B Practicum IV (2)

PSY841C Practicum IV (3)

Practicum V 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.

PSY842A Practicum V (1)

PSY842B Practicum V (2)

PSY842C Practicum V (3)

PSY845 Practicum V (2)
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.

PSY848 Practicum V (3)
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.

PSY851 Supervised Field Experience (1)
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.).

PSY852 Supervised Field Experience (2)
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.).

PSY853 Supervised Field Experience (3)
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.).

Dissertation courses are capstone scholarly projects that demonstrate an original contribution to the field of counseling psychology.

PSY862A Dissertation I (1)

PSY862B Dissertation I (2)

PSY862C Dissertation I (3)

PSY863A Dissertation II (1)

PSY863B Dissertation II (2)

PSY863C Dissertation II (3)

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.

PSY871A Doctoral Internship (1)

PSY871B Doctoral Internship (2)

PSY871C Doctoral Internship (3)

PSY871D Doctoral Internship (4)

PSY871E Doctoral Internship (5)

PSY871F Doctoral Internship (6)

PSY872 Pre-Doctoral Internship 2 (6)
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.

PSY873 Pre-Doctoral Internship 3 (6)
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.

PTH: PHYSICAL THERAPY

PTH502 Human Gross Anatomy (4)
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.

PTH502L Human Gross Anatomy Lab (2)
This course provides a basic understanding of human anatomy, with an emphasis on the musculoskeletal and neuromuscular systems through the study of head/neck, trunk, and upper/lower extremities. Clinical correlates will examine normal movement and pathological processes. It uses a combination of systems based and region-specific instruction. Lectures are complemented by Cad Lab work.

PTH506 Principles of Neuroscience (3)
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.
Prerequisite: PTH502

PTH506L Lab: Principles of Neuroscience (1)
Laboratory experience includes the human nervous system material, brain sections, and anatomical models. Two hours of laboratory per week.
Corequisite: PTH506

PTH690 Clinical Skills (3)
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.

PTH691 Clinical Sciences (6)
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.
*Prerequisites: PTH502, PTH502L, **and** PTH690*

PTH701 Foundations of Movement Science I (7)
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.
*Prerequisites: PTH502, BIO504, **and** PTH700*

PTH702 Movement Science (3)
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.
Prerequisite: PTH502

PTH703I Musculoskeletal Physical Therapy, Part One (2)
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.

PTH703II Musculoskeletal Physical Therapy, Part Two (10)
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.
Prerequisite: PTH703I

PTH704 Fundamentals of Exercise Physiology (3)
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.
*Prerequisites: PTH502 **and** BIO504*

PTH706 Clinical Physiology (5)
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.
*Prerequisites: PTH502 **and** PTH502L*

PTH707 Cardiovascular and Pulmonary Physical Therapy (7)
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.
Prerequisite: PTH703II

PTH708 Pediatric Physical Therapy (4)
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.
*Prerequisites: PTH702 **and** PTH707*

PTH709 Neuromuscular Physical Therapy (9)
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.
*Prerequisites: PTH702 **and** PTH707*

PTH713I Multi-System Physical Therapy, Part One (1)
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.

PTH713II Multi-System Physical Therapy, Part Two (2)
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.
Prerequisite: PTH713I

PTH722 Research I (3)
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.

PTH724I Research II, Part One (1)
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.
Prerequisite: PTH722

PTH724II Research II, Part Two (1)
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.

PTH730 Clinical Experience I-A (4)
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.

PTH731I Clinical Experience IB-I (1)
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.

PTH731II Clinical Experience IB-II (3)
The second 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.

PTH733 Clinical Experience II (7)
A ten-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.

PTH735I Clinical Experience V, Part One (1)
The first part of this sixteen-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.

PTH735II Clinical Experience V, Part Two (11)
The second part of this sixteen-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.

PTH741 Principles of Practice I: Intro to PT Practice (3)
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.

PTH742I Principles of Practice II: Communication and Ethics, Part One (1)
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.
Prerequisite: PTH741

PTH742II Principles of Practice II: Communication and Ethics-Part Two (2)
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.

PTH743 Principles of Practice III: Ethical Action and Social Responsibility (1)
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.
Prerequisite: PTH742II

PTH744 Principles of Practice IV: Service Learning (1)
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.
Prerequisite: PTH743

PTH745I Principles of Practice V: Healthcare, Management & Policy, Part One (1)
Part one of this course integrates the principles of professional development with health care policy, delivery, and management.

PTH745II Principles of Practice V: Healthcare, Management & Policy, Part Two (2)
Principles of Practice V integrates the principles of health care delivery, management, policy and leadership within the physical therapy profession.
Prerequisite: PTH744

PTH746I Clinical Experience III-Part One (1)
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.

PTH746II Clinical Experience III-Part Two (5)
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.

PTH747 Clinical Experience IV (6)
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, subacute, 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.

PTH748 Research III: Evidence in Practice (2)
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 PTH724. Students also complete a Knowledge-to-Action project aimed at increasing the use of research evidence in clinical practice.
Prerequisite: PTH724II

PTH797 Independent Study (1)
Prerequisite: Permission of Instructor

PTH800 Continuing Graduate Credit (1)

PWR: PROFESSIONAL WRITING

PWR501 Introduction to Professional Writing (3)
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.

PWR506 Grant Writing (3)
This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.

PWR516 Technical Writing (3)
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.

PWR517 Teaching Technical Writing (3)
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.

PWR521 Use of New and Social Media (3)
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.

PWR525 Business and Organizational Writing (3)
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.
Prerequisite: PWR601

PWR532 Science and Environmental Writing (3)
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.

PWR562 Writing For Digital Media (3)
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

PWR572 Principles of Information Architecture (3)
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.
Prerequisite: PWR601

PWR573 Web Design and Development I (3)
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.

PWR574 Web Design and Development II (3)
A continuation of Web Design and Development I, this course will advance student knowledge and understanding of multimedia authoring tools.

PWR601 Introduction to Professional Writing (3)
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.

PWR606 Grant Writing (3)
This course focuses on teaching the conventions and fundamentals of writing successful grants for nonprofit organizations, educational institutions, and government agencies.

PWR613A Special Topics: (1)
This course will explore different special topics in professional writing.

PWR616 Technical Writing (3)
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)
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.

PWR620 Political and News Writing (3)
This course is designed to give students a working knowledge 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.

PWR621 Use of New and Social Media (3)
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.
Prerequisite: PWR601

PWR625 Business and Organizational Writing (3)
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.
Prerequisite: PWR601

PWR632 Science and Environmental Writing (3)
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.

PWR641 Financial Writing (3)
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.

PWR662 Writing for Digital Media (3)
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)
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.
Prerequisite: PWR601

PWR673 Web Design and Development I (3)
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)
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)
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.
Prerequisite: PWR601

PWR694 Client Project (3)
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.

PWR699 Professional Writing Portfolio (3)
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.

SDE: STUDENT DEVELOPMENT

SDE101 Strategies for Success in College (1)
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.

SDE140 Peer Tutor Training (1)
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.

SDE141 Writing Mentor Training (1)
This course prepares writing mentors to be effective and successful peer tutors. Through a mix of group discussion and practice-based learning, students will learn the best practices for being employed as a writing tutor. Students must be a writing mentor at the Writing Center to enroll in this course.

SDE310 Career Preparation (1)
This course will prepare participants to develop professional skills and competencies in accordance with Chatham University's Mission.

SDE493 Independent Study (3)

SPT: SPORTS MANAGEMENT

SPT150 Introduction to Sports Management (3)
This course provides foundational understanding of the business of professional and collegiate sports, its structure, and stakeholder aims. Through case analyses, readings, and projects, students examine the dynamics of pricing, broadcasting, and advertising investment, athlete representation, gender and race bias, contract and compensation negotiation, fan behavior, and other industry macrotrends.

SPT15 Economics of Sports Management (3)
This course provides foundational understanding of the business of professional and collegiate sports, its structure, and stakeholder aims. Through case analyses, readings, and projects, students examine the dynamics of pricing, broadcasting, and advertising investment, athlete representation, gender and race bias, contract and compensation negotiation, fan behavior, and other industry macrotrends.
*Prerequisites: SPT150 **and** ECN101 **or** ECN102*

SPT225 Sports Sales & Promotions (3)
This course focuses on the fundamental roles of developing, activating, and managing sport sponsorship through sales and promotion. Through shared practical

examples, this course will view how to generate ticket sales through sport promotion and how to utilize e-commerce as a promotional tool in sports.
Prerequisite: SPT150

SPT250 Law and Ethics in Sports Management (3)
Students review and understand the legal foundations and issues specific to sports management. Readings and activities emphasize risk management, participant safety, and appropriate service provider behavior.
Prerequisite: SPT150

SPT275 Marketing and Public Relations of Sports Management (3)
This course focuses on effective marketing, promotions, public relations, and communications tactics in the multi-billion-dollar sports industry. Readings, research, case analysis, invited speakers and other sources highlight theoretical principles and best practices when marketing and promoting sports franchises and events.
*Prerequisites: SPT150 **and** BUS243*

SPT300 Budget and Finance in Sports Management (3)
This course applies the principles and practices of financial management to organizations in the sports industry. Included in the course are the basics of accounting, budgets and budgeting systems, performance measures creation, and financial statement evaluation for the purpose of cost analysis and planning.
*Prerequisites: SPT150 **and** BUS272*

SPT300 Sports Sales & Promotions (3)
This course focuses on the fundamental roles of developing, activating, and managing sport sponsorship through sales and promotion. Through shared practical examples, this course will view how to generate ticket sales through sport promotion and how to utilize e-commerce as a promotional tool in sports.
*Prerequisites: SPT150 **and** BUS243*

SPT375W Sports Management Analytics & Intelligence (3)
Sports analytics makes use of quantitative techniques to measure and predict performance for competitive advantage in sports settings. Hands-on analyses in class combined with current events discussion, case examples, invited speakers, and projects, hones skills in critical thinking, statistical modeling, predictive analytics, game theory, optimization, and simulation.
Prerequisite: SPT150

SPT450 Sports Management Strategy (3)
Students integrate previous coursework in sports management, marketing, law, and business intelligence to develop a business strategy in a chosen competitive sports sector. Strategies are grounded in internal and external factors such as organizational strengths, relative advantages, the global context and the social responsibility of sports organizations.
*Prerequisites: SPT250, SPT300 **and** SPT375W*

SSA: SOCIAL SERVICES ADMINISTRATION

SSA490 Integrative Capstone (3)
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.
*Prerequisites: PSY213 **and** PSY314W*

SSC: SOCIAL SCIENCE

SSC101 Introduction to Cultural Anthropology (3)
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.

SSC121 Introduction to Genocide Studies (3)
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.

SSC131 Propaganda and History (3)
This course examines the uses and common techniques of propaganda in the context of different historical eras during the 20th century.

SSC207 Internship Prep: Social Sciences (1)
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.

SSC214 Special Topics (3)
Special topics

SSC219 American Jewish Experience (3)
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.

SSC310 Career Prep: Social Sciences (1)
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.

SUS: SUSTAINABILITY

SUS100 Sustainability Science (3)
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.

SUS102 Sustainability and Society (3)
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.

SUS201 Integrative Biology (3)
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 (1)
Laboratory exercises including data collection, small-scale experimentation, data modeling, and simulation will be experienced to complement the material covered in SUS201. Two hours of laboratory will be held per week at the Eden Hall Campus aquatic science lab. Additional Fee(s): Laboratory fee

SUS203W Planetary Health: Human Health & Natural Systems (3)
This course examines human health and ecological disruption through the lens of planetary health. Topics include the interconnected systems of climate, epidemiology, toxicology, radiation, water, air, and soil pollution. Communication strategies for issues, consequences, and solutions in writing intensive experiences provide opportunities to share knowledge with a variety of audiences.
*Prerequisite: BIO144, SUS100, **or** SUS201*

SUS210 Sustainability and Technology (3)
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.

SUS213 Special Topics (3)
Special topics

SUS302W Social Justice and Sustainability (3)
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.

SUS306W Equitable Community Development (3)
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.

SUS322 Natural Resource Management Policy and Law (3)
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.
Prerequisite: SUS102

SUS330 Sustainable Cities (3)
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)
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.

SUS350 Skills for Sustainability Professionals (2)
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.
Prerequisite: SUS201

SUS352 GIS Software – Skills and Applications (3)
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.

SUS355 Forestry (3)
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)
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.
Prerequisite: SUS102

SUS401 Sustainability Policy and Decision Making (3)
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.

SUS406 Environmental Policy (3)
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.

SUS407 Natural Resource Leadership (3)
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. Additional Fee(s): Course fee

SUS416 Sustainable Decision Analysis (3)
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.
Prerequisite: SUS352

SUS426 Sustainable Aquaculture (3)
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. Additional Fee(s): Course fee

SUS435 Green and Social Innovation (3)
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.

SUS435W Green and Social Innovation (3)
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.

SUS436 Sustainable Energy Applications (3)
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.
*Prerequisite: BUS243, BUS310W, **or** SUS335*

SUS460 Energy Policy for Sustainability (3)
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.
*Prerequisite: POL101 **or** SUS335*

SUS470 Corporate Social Responsibility (CSR) (3)
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.

SUS490 Integrative Capstone (3)
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.
Prerequisite: ENV327W

SUS491 Independent Study (1)
Prerequisite: Permission of Instructor

SUS492 Independent Study (2)
Prerequisite: Permission of Instructor

SUS493 Independent Study (3)
Prerequisite: Permission of Instructor

SUS500 Essential Readings in Sustainability (0)
This course provides grounding in essential texts in sustainability. Readings vary and are selected by Falk School faculty. This course meets on a bi-weekly basis to discuss analyze and discuss these readings. Students will contribute to forums and blog discussions throughout the semester

SUS502 Sustainability and Systems (3)
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)
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.

SUS506 Sustainability & Policy: Water (3)
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.

SUS507 Natural Resource Leadership (3)
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. Additional Fee(s): Course fee

SUS508 Environmental Statistics (3)
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.

SUS510 Pursuing Sustainability through Governance (3)
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.

SUS511 Project Design, Methods, and Evaluations (3)

SUS512A Sustainability in Pittsburgh (1)
Pittsburgh and the surrounding region have experienced several waves of change; the current described as a "green renaissance." Students will engage in seven weekly workshops and guest lectures with introducing them to the city's history, key sustainability initiatives and job prospects. Students will provide seven weekly blogs, one for each visit.

SUS512B Sustainability in Pittsburgh (2)
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.

SUS512C Sustainability in Pittsburgh (3)
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.

SUS513 Principles and Practices of Sustainable Business (3)
The course explores sustainable business practices, emphasizing firms' societal impact. It delves into corporate structure, decision-making, and Corporate Societal Responsibility (CSR) matters in supply chains, governance, finance, and reporting. Empowering future purpose-driven business leaders with knowledge and tools.

SUS514 Building Sustainable and Resilient Cities (3)
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 disproportionally affected by urban decline. Using systems theory and the example of Pittsburgh, we explore comprehensive approaches to equitable, resilient, and sustainable neighborhood revitalization.

SUS515 Applied Ecology (3)
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.

SUS516 Sustainable Decision Analysis (3)
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.

SUS517 Climate Change and Sustainability (3)
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.

SUS520 Community Energy Systems (3)
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.

SUS525 Environmental Communications (3)
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.

SUS526 Sustainable Aquaculture (3)
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. Additional Fee(s): Course fee

SUS535 Applied Green and Social Innovation (3)
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.

SUS580 Sustainable Behavior Change (3)
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.

SUS591 Independent Study (1)
Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.
Prerequisite: Permission of Instructor

SUS592 Independent Study (2)
Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.
Prerequisite: Permission of Instructor

SUS593 Independent Study (3)
Students work with a professor/instructor to develop and follow a curriculum which covers a topic of special interest.
Prerequisite: Permission of Instructor

SUS601 Applied Ecology (3)
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. Additional Fee(s): Course fee

SUS603 Sustainability: Ethics, Equity, Justice (3)
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.
Prerequisite: SUS504

SUS604 Sustainable Land Use (3)
Using land sustainably is a key component of many of the UN Sustainable Development Goals. In this course, students will learn the history of land use planning, how professionals measure and make claims about sustainable land use practices, and how land use policy and law are created and implemented.
Prerequisite: SUS510

SUS605 Leadership for Transitions to Sustainability (3)
This class builds a foundation for sustainability management through the exploration of various methodologies for sustainable innovation and transitions. Students study innovation management, learn how to analyze systemic socio-technological problems, learn to develop potential solutions, and understand the organizational and societal structures necessary to support long-term change.

SUS606 Urban Planning and Political Ecology (3)
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.

SUS617 Pathways to a Renewable Future (3)
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)
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).
Prerequisite: SUS502

SUS621 The Craft of Research (1)
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.

SUS640 Sustainable Community Development (3)
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.
*Prerequisite: FST508, FST509, **or** SUS504*

SUS681 Special Topics (1)
Special topics

SUS683 Special Topics (3)
Special topics

SUS690 Internship (0)

SUS691 Internship (1)

SUS692 Internship (2)

SUS693 Internship (3)

SUS694 Research Methods in Context (1)
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.

SUS695 Thesis or Capstone Proposal Development (0)
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.

SUS696 Solution Based Learning I (2)
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.

SUS697 Solution Based Learning II (2)
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.
Prerequisite: SUS696

SUS698A Final Project (1)
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.

SUS698C Final Project (3)
Course provides supervision and guidance for the final project to complete the MSUS degree requirements. Students will complete a final project as part of a group developed and managed within this class. With permission of the Program Director, students may complete the final project as an independent capstone or thesis.

SUS698II Final Project II - Part Two (1)
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.
*Prerequisite: SUS698A **or** SUS698C*

SUS699 Advanced Seminar in Sustainability (3)
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.
*Prerequisite: SUS601 **and** SUS602*

SUS800 Graduate Continuing Credit (1)

SWK: SOCIAL WORK

SWK101 Introduction to Sociology (3)
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.

SWK102 Introduction to Social Work, Social Justice and Social Issues (3)
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.

SWK103 Resiliency in Academic and Professional Roles (1)
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.

SWK201W Human Behavior in the Social Environment I (3)
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.
Prerequisite: PSY101

SWK202 Human Behavior in the Social Environment II (3)
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.
Prerequisite: SWK202W

SWK224 Juvenile Justice (3)
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 CRM224.

SWK321 Social Welfare Policy (3)
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.

SWK322W Social Welfare: Women and Policy (3)
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.

SWK325 Deviant Behavior (3)
This course examines deviance using sociological, criminological, and psychological 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.
*Prerequisite: CRM101 **or** SWK101*

SWK351 Interviewing and Assessment with Individuals (3)
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.
Prerequisite: SWK102

SWK352 Interventions with Individuals and Families (3)
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.
Prerequisite: SWK102

SWK354 Practice with Groups (3)
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.
Prerequisite: SWK102

SWK355 Practice with Organizations and Communities (3)
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.
Prerequisite: SWK102

SWK377 Special Topics (3)
Special topic

During Field Placements, 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.
*Prerequisites for all Field Placements: SWK352, SWK354, **and** SWK355*

SWK451A Field Placement I (1)

SWK451B Field Placement II (2)

SWK451C Field Placement III (3)

SWK451D Field Placement IV (4)

SWK451E Field Placement V (5)

SWK490 Integrative Capstone (3)
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.
*Prerequisites: PSY213 **and** PSY314W*

SWK491 Independent Study (1)
Prerequisite: Permission of Instructor

SWK492 Independent Study (2)
Prerequisite: Permission of Instructor

SWK493 Independent Study (3)
Prerequisite: Permission of Instructor

SWK494 Independent Study (4)
Prerequisite: Permission of Instructor

THT: THEATER

THT141 Acting One (3)
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.

THT147 Stage Craft (3)
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): Materials fee

THT149 Play Performance (3)
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.

THT231 Acting Two (3)
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.

THT240 Special Topics (3)
Special topics

THT241 History of Drama (3)
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.

THT245 Scene Work for the Stage (3)
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: THT 141 **and** permission of the instructor*

THT260 Theatre Production Lab (3)
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.

THT313 Special Topics (3)
Special topics

THT380 Acting for the Camera (3)
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. Additional Fee(s): Materials fee

THT458 Directing (4)
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.

THT491 Independent Study (1)
Prerequisite: Permission of Instructor

WGS: WOMEN'S AND GENDER STUDIES

WGS101 Introduction to Women's and Gender Studies (3)
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 Feminist Theory (3)
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.
Prerequisite: CST183

WGS202 Women's Leadership in the 21st Century (3)
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.
*Prerequisite: CST183 **or** WGS101*

WGS210 Narratives of Girlhood: Perils and Possibilities (3)
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?

WGS322W Social Welfare: Women and Policy (3)
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.

WGS365 Gendered Resistance, Riots, and Rebellions (3)
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.
*Prerequisite: ENG105 **or** WGS101*

WGS490 Integrative Capstone (3)
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.
Prerequisite: ENG350W