## Undergraduate Catalog 2024-2025



# Framingham <br> State University 

www.framingham.edu

## ACCREDITATION

Framingham State University is accredited by the New England Commission on Higher Education, (NECHE), the regional accreditation agency for colleges and universities in the six New England states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The Commission consists of faculty and administrators from affiliated institutions and public members. The Commission is recognized by the United States Secretary of Education as a reliable authority on the quality of education for the institutions it accredits. The Commission is also recognized by the Council for Higher Education Accreditation (CHEA), affirming that the NECHE Standards and processes are consistent with the quality, improvement, and accountability expectations that CHEA has established.

Accreditation is a status that provides assurance to prospective students, their families and the general public that an institution meets clearly stated Standards for Accreditation and that there are reasonable grounds to believe the institution will continue to meet those standards in the future. More information about accreditation is available on this website and from the Council for Higher Education Accreditation (CHEA), www.chea.org, and the United States Department of Education http://www.ed.gov/admins/finaid/accred/index.html?src=qc.
Accreditation by NECHE is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution. Inquiries regarding the status of an institution's accreditation by NECHE should be directed to the administrative staff of the school or college.

## PROGRAM ACCREDITATION BY:

The baccalaureate degree program in nursing at Framingham State University is accredited by the Commission on Collegiate Nursing Education [www.ceneaccreditation.org]
Council for the Accreditation of Educator Preparation (CAEP) [caepnet.org]
Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND), 120 South Riverside Plaza, Suite 2190, Chicago, IL 606066995, 312-899-0040, extension 5400; for the Food and Nutrition Major, with concentrations in Nutrition Dietetics and Coordinated Program in Dietetics. [www.eatrightpro.org/acend]
International Assembly for Collegiate Business Education (IACBE) [iacbe.org]
National Association of Schools of Art and Design (NASAD) [nasad.arts-accredit.org]

## APPROVED BY:

American Chemical Society (ACS).
Initial and Professional Licensure Programs for educators are approved by the Department of Elementary and Secondary Education (DESE) of the Commonwealth of Massachusetts, and the National Association of State Directors of Teacher Education and Certification (NASDTEC).
Interstate Certification Compact on Certification of Educational Personnel.

## MEMBER OF:

American Association of Colleges of Nursing (AACN)
American Association of Colleges for Teacher Education (AACTE)
American Association of State Colleges and Universities (AASCU)
Council for the Advancement and Support of Education (CASE)
National League for Nursing (NLN)
New England Association of Schools and Colleges (NEASC)
The College Board

## NOTICE TO STUDENTS

The rules, regulations, policies, fees, and other charges, courses of study, and academic requirements that appear in this catalog were in effect at the time of its publication. Like everything else in this catalog, they are published for informational purposes only, and they do not constitute a contract between the University and any student, applicant for admission or other person. Whether noted elsewhere in this catalog or not, the University reserves the right to change, eliminate, and add to any existing (and to introduce additional) rules, regulations, policies, fees and other charges, courses of study and academic requirements. Whenever it does so, the University will give as much advance notice as it considers feasible or appropriate, but it reserves the right in all cases to do so without notice.

## TABLE OF CONTENTS

Mission Statement ..... 1
History of Framingham State University ..... 3
Undergraduate Admissions ..... 4
Bursar/Student Accounts - Tuition and Fees ..... 15
Financial Aid ..... 24
Academic Regulations ..... 30
Campus Resources ..... 52
Academic Programs ..... 60
Course Information ..... 73
Course Descriptions ..... 76
General Education Requirements ..... 226
ACADEMIC DEPARTMENTS
Accounting, Economics, and Finance ..... 239
Art and Music ..... 245
Biology ..... 255
Chemistry and Food Science ..... 262
Communication, Media, and Performance ..... 269
Computer Science ..... 273
Education ..... 279
English ..... 293
Environment, Society, and Sustainability ..... 307
Fashion Design and Retailing ..... 320
History ..... 326
Interdisciplinary Majors and Minors ..... 330
Management and Business \& Information Technology ..... 352
Marketing ..... 359
Mathematics ..... 362
Nursing ..... 367
Nutrition and Health Studies ..... 370
Political Science, Law, and Global Studies ..... 379
Psychology and Philosophy ..... 387
Sociology and Criminology ..... 390
World Languages ..... 399
GENERAL INFORMATION
FSU Board of Trustees ..... 407
Administration ..... 408
Faculty ..... 420
Emeriti ..... 428
Campus Buildings and Facilities ..... 433
Academic Calendar ..... 435

## Mission Statement

## PUBLIC HIGHER EDUCATION SYSTEM MISSION STATEMENT

The public college and university system in the Commonwealth of Massachusetts comprises fifteen community colleges, nine state colleges and the five campuses of the University of Massachusetts. The system exists to provide accessible, affordable, relevant, and rigorous academic programs that adapt to meet changing individual and societal needs for education and employment. All campuses are committed to operating effectively and efficiently in order to maintain tuition and fees at a level as low as possible, while providing a high-quality education to every student who qualifies for admission. The public system is committed to continuous improvement and accountability in all aspects of teaching and learning. The Board of Higher Education and institutional boards of trustees recognize their responsibilities to the taxpayers and residents of Massachusetts in the performance of their roles and responsibilities. Massachusetts public higher education is a system with a distinguished past, increasing pride, and unlimited potential.

## STATE UNIVERSITY MISSION STATEMENT

There are six comprehensive state universities - Bridgewater State University, Fitchburg State University, Framingham State University, Salem State University, Westfield State University, and Worcester State University - and three specialized colleges - Massachusetts College of Art and Design (MassArt), Massachusetts College of Liberal Arts and Massachusetts Maritime Academy. All institutions integrate liberal arts and sciences programs with professional education, and the three specialized colleges also focus on academic areas identified in the colleges' names.

Each institution places a special emphasis on teaching and lifelong learning, and promotes a campus life that fosters intellectual, social and ethical development. Committed to excellence in instruction and to providing responsive, innovative and educational programs of high quality, they seek to develop each student's critical thinking, quantitative, oral and written communications skills, and practical appreciation of the arts, sciences and humanities as they affect good citizenship and an improved quality of life. The state system provides a campus environment where the ideas, values, perspectives and contributions of all students are respected.

Massachusetts state universities \& colleges are strategically located to facilitate access to baccalaureate and master's degree programs for Commonwealth residents who meet their high standards for admission. In recognition of their responsibilities to Massachusetts taxpayers to manage their resources efficiently and to maintain tuition and fees at a level as low as possible, each campus has a distinctive academic focus based upon its established strengths and regional and state needs. Each institution is a leader and resource for the community and contributes to the region's cultural, environmental, and economic development.

## FRAMINGHAM STATE UNIVERSITY MISSION STATEMENT

Framingham State University prepares students for a productive life, enhanced by learning and leadership that will contribute to the culturally diverse world of the twenty-first century.

Founded by Horace Mann in 1839 as America's first public teachers' school, Framingham State University today offers undergraduate and graduate programs encompassing the arts and sciences and professional studies.

Committed to excellence, the Framingham State University learning community comprises teacherscholars, librarians, students, and staff who promote free inquiry, the respectful exchange of ideas, ethical conduct, and the belief that diversity in its many forms is essential to the educational experience. In an environment that supports active, collaborative learning, students work closely with faculty to engage significant bodies of knowledge and develop their ability to gather and evaluate information, communicate effectively, think critically and creatively, reason quantitatively, and apply information and emerging technologies.

At Framingham State University teaching is the primary role of faculty, who engage in their disciplines through instruction, scholarship, and service on campus and in their professional communities. The University serves as an important educational and cultural center in the MetroWest region of Massachusetts.

A Framingham State University education cultivates thoughtful, responsible local and global citizens, prepares students for a career, and positions them for success.

## FRAMINGHAM STATE UNIVERSITY VISION STATEMENT

Framingham State University Our vision is to create a vibrant and innovative educational environment that is dedicated to academic excellence, ethical citizenship, personal and professional growth, global stewardship, and public purpose and commitment through an inclusive and collaborative community.

## FRAMINGHAM STATE UNIVERSITY CORE VALUES

The following shared core values direct our thinking, planning, actions, and initiatives:

- Academic Excellence: We strive to inspire a culture informed by the joy and work of learning, in which curiosity, discovery, innovation, and excellence are the driving forces in everything we do.
- Ethical Citizenship: We seek to foster a culture of ethics, integrity and respect, such that it creates the fertile ground that motivates our work and work ethic.
- Personal and Professional Growth: We aspire to create a nurturing culture where all thrive and are supported in their own paths toward lifelong growth and leadership in personal and professional ways.
- Global Stewardship: We endeavor to advance global understanding, empathy and stewardship for people and the environment, embracing diversity and a sense of community in both local and global settings.
- Public Purpose and Commitment: We strive to construct a community that is committed to public purpose, informed action and service.
- Inclusive and Collaborative Community: We seek to encourage a supportive, diverse, collaborative and cohesive environment in which we learn from each other through informed, clear, and open communication.


## The History of Framingham State University

Framingham State University began in a building, still standing today, on the corner of Lexington Common on July 3, 1839. It had as its mission the training of teachers, and was the first state-supported normal school (a school which trains teachers) in the United States of America. Twice it outgrew its accommodations, moving first to West Newton and then to its present location on Bare Hill in Framingham in 1853. From the beginning, the Normal School met the challenge of being the first model by educating teachers who were in demand for the common schools of Massachusetts and, indeed, for schools throughout the nation. From the first class, Normal School graduates participated in the new field of education for the blind and the deaf. They traveled to the South and to the West to teach in schools being established for Blacks and Native Americans, and they went as missionaries to distant lands.

From 1848 to 1898 Framingham also conducted an advanced program for women who aspired to careers in high school and college teaching, school administration, law and medicine, opening unprecedented educational and career opportunities for these women. There were principals, professors, doctors, and writers among the early graduates, and women who participated in the suffrage and temperance movements; indeed, in all of the significant educational and social reforms of the nineteenth century. At the close of the nineteenth century, the first teachers of the household arts were graduated from a new program at Framingham, laying the foundation for studies in nutrition and food science, as well as clothing and textiles.

The student body increased steadily during the twentieth century and with it the size of the campus and the number of buildings. New programs and courses marked the increasingly professional character of the education offered, while extracurricular organizations were formed to enrich student life. In 1932 the Massachusetts Normal Schools became the State Teachers Colleges, and in 1960 they became State Colleges with a mandate to develop liberal arts curricula. Framingham, which had served only women, became coeducational in 1964. The University continued to add new programs in the 1970's and 1980's such as Economics, Political Science, and Sociology, as well as career-orientated programs in Business Administration, Computer Science, Food \& Nutrition, Food Science, Medical Technology, and Nursing, among others, to increase the options for students and to meet the needs of the Commonwealth. In 2010, the Governor signed legislation changing the State Colleges to State Universities. In the past decade, additional programs were added in American Sign Language, Child \& Family Studies, Criminology, Environmental Science, and Hospitality \& Tourism Management.
Today, Framingham State University is situated on a beautiful 54-acre campus in the suburban town of Framingham. The University's location in the economically vibrant Metro West area affords many opportunities for students and graduates alike. Approximately 3,500 full- and part-time students with 44 bachelor's degree programs and 25 master's degree programs are enrolled at the University.

## Undergraduate Admissions

All candidates seeking admission to an undergraduate degree program must submit an application to the Office of Undergraduate Admissions. Framingham State University (FSU), as an academic community, is committed to an admissions process that is personalized, convenient, and responsive to your questions and concerns. The University welcomes applications from all candidates regardless of their race, color, sex, sexual orientation, religion, creed, disability, veteran status, age, national origin, or marital status. The approval of candidates for admission is made on a selective basis. The University is interested in students whose preparatory program, scholastic achievement, aptitudes, interests, character, and established study habits give definite promise of success in a university program.

## CAMPUS VISITS

Prospective students are encouraged to visit campus. The Office of Undergraduate Admissions offers campus tours throughout the week and on select Saturdays. Please call 508-626-4934 or to view available dates and to schedule an appointment visit, please visit www.framingham.edu/admissions.

In the case of inclement weather conditions on a day you have a scheduled visit, please call the Framingham State University Weather Emergency number, 508-626-4898. If classes are cancelled, all tours will be cancelled as well.

## ADMISSIONS STANDARDS/SECONDARY SCHOOL Academic Course Requirements

Framingham State University and the Massachusetts Department of Higher Education require the following college-preparatory academic units as a minimum:

```
4 courses in English
4 courses in Mathematics (Algebra I, II & Geometry or Trigonometry or comparable
    coursework) including mathematics during the final year of high school
3 courses in Science (3 years of lab science)
2 courses in Social Science
2 courses in Foreign Language (in a single language)
2 courses in College Preparatory Electives
```

Please refer to the Framingham State University Undergraduate Admissions web site at www.framingham.edu/admissions or the Massachusetts Department of Higher Education website at www.mass.edu for more specific information regarding the minimum academic unit requirements.

Please note that these are minimum standards and meeting them does not guarantee admission to the University. Any offer of admission is conditional upon the student successfully completing all state and local requirements for a high school diploma.

## Freshman Grade Point Average (GPA) Requirements

Applicants in a comprehensive college preparatory curriculum must have a recalculated minimum cumulative grade point average of a 3.00 on a 4.00 scale or meet the minimum GPA requirement on the sliding scale listed below. Courses clearly identified on the high school transcript as Honors or Advanced Placement level will be given additional weight.

Students who do not submit standardized test scores will be considered under the test optional admission policy.
Test Optional Admission Policy:

- Students are not required to submit SAT/ACT scores.

Scores on the new writing section of the SAT will not affect the sliding scale for freshman applicants. The sliding scale will continue to be based on the combined evidence based reading and math sections of the SAT.

| Recalculated | Combined SAT EBRW \& M High School GPA <br> (ACT Equivalent in Italics) |  |
| :--- | :---: | :---: |
| $2.51-2.99$ | 990 | $(19)$ |
| $2.41-2.50$ | 1030 | $(20)$ |
| $2.31-2.40$ | 1070 | $(21)$ |
| $2.21-2.30$ | 1110 | $(22)$ |
| $2.11-2.20$ | 1140 | $(23)$ |
| $2.00-2.10$ | 1180 | $(24)$ |
| Less than 2.00 | Not admissible |  |

Please note that these are minimum standards and meeting them does not guarantee admissions to the University.

## First-Year First-Time Application Procedure

1. Application Form: Applicants are encouraged to utilize the online application available at: www.framingham.edu/apply.

Applying online allows the applicant to verify whether all required materials have been received by the University within two weeks of receipt of the application. Please note: The online application requires payment of the application fee by MasterCard, Visa, or Discover. Students submitting an official fee waiver must utilize the "pay later" option on the web application or the paper application available upon request.
2. Application Fee: Please submit the application fee listed on the current year's application.
3. Application Filing Dates: All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

| Fall Early Action (First-Year First-Time applicants only) | November $15^{\text {th }}$ |
| :--- | :--- |
| Fall Regular Decision (September entrance) | February $15^{\text {th }}$ |
| Spring Semester (January entrance) | December 1 |

After these dates, contact the Office of Undergraduate Admissions to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their files after the February $15^{\text {th }}$ (fall) and December $1^{\text {st }}$ (spring) preferred filing dates.

The University is able to offer on-campus housing to most qualified applicants who complete their files by the February $15^{\text {th }}$ preferred filing date.
4. SECONDARY SCHOOL RECORD: The school record should include the applicant's entire academic transcript, including weighted class rank and/or grade point average (GPA). The applicant must request that the guidance office send the official record bearing the school's official stamp or seal directly to the Office of Undergraduate Admissions. Students may submit their applications with a high school transcript including grades through the end of the junior year. The school should forward first and second quarter senior year grades when available. A copy of the student's schedule for the entire senior year should also be included. (Students with a General Education Equivalency (GED) or High School Equivalency Test (HiSET) must have an official score report forwarded to the Office of Undergraduate Admissions and submit an official high school transcript for the period high school was attended.) All students, including home-schooled applicants, must present a high school diploma, GED, or HiSET prior to entrance to the University.
5. REQUIRED EXAMINATIONS: Freshmen applicants are required to submit official score results of the SAT or ACT unless the applicant graduated from high school more than 3 years ago. Students who do not submit standardized test scores will be considered under the test optional admission policy. Official test results must be sent directly to the University from the College Board. The College Board code number for Framingham State University is 3519 . Applicants are encouraged to take this test no later than January of their senior year. The ACT code number for Framingham State University is 1904. All applicants who participated in ESL courses during their secondary school education (or whose secondary school instruction was not primarily in English) must submit the Test of English as a Foreign Language (TOEFL). Homeschooled students and graduates of non-accredited schools may be required to submit the results of additional nationally-normed tests such as the SAT Subject Tests. All non-native/non-heritage English speaking applicants who participated in ESL courses during their secondary school education (or whose secondary school instruction was not primarily in English) may be required to submit proof of English proficiency (See International Student Admission section).
6. DESCRIPTION OF ACTIVITIES: Students who are not currently in high school should submit a résumé or brief summary of activities that accounts for all time periods since leaving high school.
7. COLLEGE COURSEWORK: Students who expect to have completed any college course work prior to graduation from high school should apply as freshmen, but must list the appropriate information in the "College Information" section of the application.
8. ADVANCED PLACEMENT or INTERNATIONAL BACCALAUREATE: Students who plan to take or have taken Advanced Placement or International Baccalaureate exams should list the exams under the "Advanced Placement" section of the application and have official scores forwarded to FSU when available.

## DEFERRED ADMISSION

A student may apply for admission and, if accepted, reserve a place for the following year by submitting the required deposit and a written request to the Admissions Committee. Deferred admission is granted with the provision that the applicant will not be enrolled at any other college or university during this interim period without prior approval of the Office of Undergraduate Admissions at Framingham State University.

## Undergraddute Transfer Credit Policies

Framingham State University (FSU) determines transferability of credits from other colleges and universities based on best practices as outlined by the American Association of Collegiate Registrars and Admission Officers (AACRAO), the American Council on Education (ACE), the Council for Higher Education Accreditation (CHEA), and the New England Commission on Higher Education (NECHE) Standards on "Integrity in the Award of Academic Credit (4.29-4.32)". Transfer and allocation of credit is determined based on the sending institution's regional-accreditation, the comparability of the learning experience to FSU, and the applicability of the learning experience to the student's selected major/minor at FSU.

Stipulations that apply to transfer credit include:

- College-level courses completed at colleges and universities accredited by the New England Commission on Higher Education (NECHE), or similar regional associations, are acceptable for transfer to FSU.
- Coursework completed at non-regionally accredited institutions or non-profit companies may be considered on an individual student basis by the major department's curriculum committee and department chair, through a thorough examination of course content, syllabi, and learning objectives. In the event of a request occurring outside the academic year that must be adjudicated prior to the start of the following fall semester, the department chair, as a member of the
department's curriculum committee, will make the determination. Students may submit an appeal of the denial of transfer credit through the Office of the University Registrar which will then be reviewed by the appropriate Academic Dean, in consultation with the Department Chair.
- Alternative Sources of Credit:
- Advanced Placement (AP) exams:

Advanced Placement (AP) credit towards graduation will be awarded to candidates who obtain scores of three (3) or higher on the College Entrance Examination Board Advanced Placement Tests. Official score results must be forwarded directly to the Office of Undergraduate Admissions. The College Level Examination Program (CLEP) enables students to earn college credit by examination. Credit is awarded for scores of 50 or higher.

- International Baccalaureate (IB) Higher level exams;
- Advanced Level (A-Level) exams;
- Joint Services Transcript (JST) as certified by the American Council on Education (ACE);
- DSST/DANTES (Defense Activity for Non-Traditional Education Support) exams.
Official score reports are required in order to be considered for transfer credit.
- International Student Admission

All official transcripts from secondary schools and colleges must be sent directly to the Office of Undergraduate Admissions. A certified course-by-course evaluation of foreign credentials must be provided by all transfer applicants and any freshman applicants who have taken university-level work outside of the United States at a university. Students may also be eligible for college credit who have completed Arbitur examinations at the secondary school level, International Baccalaureate (IB) courses, General Certificate of Education (GEC) Advance Level (i.e. "A" level courses in some countries), or Advanced Placement (AP). The certified evaluation must be in English and include grade and/or score and recommended credit hour equivalents for each course. If more than one university or college was attended, official transcripts and certified course-by-course evaluations from each institution must be forwarded to the Office of Undergraduate Admissions by the appropriate deadline.

- Transferability and allocation of courses to General Education and/or free electives will be determined by the Office of University Registrar, in consultation with academic deans, in accordance with established transfer policies and course articulations. Course to course equivalencies and/or substitutions of transfer credit towards major/minor course requirements must be approved by the department chair in which the major or minor is housed.
- Transfer credit is awarded for college-level courses only. Developmental coursework does not transfer but may be used for student placement purposes.
- Transfer credit is given only for courses in which the student received a grade of C(1.70/4.00 scale) or higher. Note: Exceptions for Spring 2020 coursework will be made where coursework with a passing grade lower than a $C$ - (1.70/4.00) will be accepted in transfer.
- A Pass/Fail grade is not transferable unless otherwise indicated on the transcript key that the value of Pass is equal to a C- (1.70) or higher. Note: Exceptions will be made for Spring 2020 coursework based on the Transcript Legend/Key from the previous institution.
- Transfer credits and grades will not affect the Institutional GPA, but will be used in determining "attempted" credits when determining academic standing.
- Coursework completed at the University prior to matriculation is treated as transfer credit. Transfer credits are not used in the calculation of the grade point average.
- Students must complete a minimum of 32 course-credits, including courses for general education, major and major-related requirements, as well as open/free electives in order to earn their Framingham State University degree.
- Once a student is accepted to the University as a degree candidate, all official transcripts are sent to the Office of the University Registrar to be reviewed by the transfer credit evaluator. All approved courses accepted in transfer will be awarded Framingham State University course-credit in an amount equivalent to FSU's course-credit. For example, transfer courses that bear 3 credits from the sending institution are the equivalent of 0.75 course-credits. Transfer courses that bear 4 credits from the sending institution are the equivalent of 1 course-credits. Transfer courses that bear 2 credits from the sending institution are the equivalent of 0.50 course-credits. Transfer courses that bear 1 credit from the sending institution are the equivalent of 0.25 course-credits.
- Annually, the Office of the University Registrar will generate a report displaying the transfer of credit, including General Education, and/or equivalencies for review by the UCC and other academic leadership.


## Transfer Grade Point Average (GPA) Requirements

The following minimum standards have been established for transfer students:

1. 12-23 transferable college credits and a 2.50 college GPA;

OR
2. Up to 23 transferable college credits, a 2.00 college GPA, and a high school transcript that meets the admission standards for freshman applicants;

OR
3. 24 or more transferable college credits and a 2.00 college GPA.

Please note that these are minimum standards and meeting them does not guarantee admission to the University. The GPA/credit requirement is based upon the most recently attended higher education institution.

## Transfer Application Procedure

1. Application Form: Applicants are encouraged to utilize the online application available at: www.framingham.edu/apply
2. Application Fee: Please submit the application fee listed on the current year's application.
3. Application Filing Dates: All materials should be submitted as early as possible. Preferred postmarked filing dates are as follows:

Fall Regular Decision (September entrance) March $15^{\text {th }}$
Spring Semester (January entrance) December $1^{\text {st }}$
After these dates, contact the Office of Undergraduate Admissions to determine if applications are still being accepted. Please note that certain majors may not be available to students completing their files after the March $15^{\text {th }}$ (fall) and December $1^{\text {st }}$ (spring) preferred filing dates.

The University is able to offer on-campus housing to most qualified applicants who complete their files by the March $15^{\text {th }}$ preferred filing date. Applicants for the January semester and those completing their fall applications after the March $15^{\text {th }}$ preferred filing date are able to place themselves on the residence hall wait list if they have been offered admission and have submitted the required admissions deposit.
4. Secondary School Record: Applicants with a General Education Equivalency (GED) or High School Equivalency Test (HiSET) must have an official score report forwarded to the Office of Undergraduate Admissions and submit an official high school transcript for the period high school was attended. All students, including home-schooled applicants, must present a high school diploma, GED, or HiSET prior to entrance to the University.
5. Required Examinations: SAT or ACT is required of transfer applicants, unless the applicant has completed 24 or more credit hours of college-level courses at the time of the application or has graduated from high school more than 3 years ago. Students who do not submit standardized test scores will be considered under the test optional admission policy. Official score results must be forwarded directly to the University from the College Board. The College Board code number for Framingham State University is $\mathbf{3 5 1 9}$. The ACT code number for Framingham State University is 1904. All non-native/non-heritage English speaking applicants who participated in ESL courses during their secondary school education (or whose secondary school instruction was not primarily in English) may be required to submit proof of English proficiency (See International Student Admission section).
6. College Transcripts: Submit official transcripts from all colleges and universities ever attended. If a student is enrolled elsewhere at the time of acceptance, a final official transcript for that semester must be submitted prior to the commencement of studies at Framingham State University. All applicants must disclose all colleges or universities ever attended regardless of whether courses were finished or credit was received. Failure to disclose this information may result in denial of admission or retroactive administrative withdrawal from the University without refund or course credits.

Please note: Only transcripts forwarded directly from the college or university the applicant attended to the Office of Undergraduate Admissions at Framingham State University are considered official transcripts. No decisions will be made by the Admissions Committee without official transcripts.
7. Courses In-Progress: List all courses in progress or that you plan to complete prior to enrollment at Framingham State University (please indicate the exact course titles, course numbers, and credit hours for each course).
8. Description of Activities: Applicants who have not been attending college continuously since graduation from high school should submit a résumé or brief summary of activities that accounts for all time periods since leaving high school.
9. CLEP/AP/IB/DSST: Applicants presenting College Board CLEP (College Level Examination Program) scores, AP (Advanced Placement) scores, IB (International Baccalaureate), or DANTES Subject Standardized Tests (DSST) scores for college credit must have official results forwarded directly to the Office of Undergraduate Admissions for evaluation. Please list the exams taken on the application, under the "Advanced Placement or CLEP Examinations" section of the application.
10.Valor Act Academic Credit Evaluation Policy and Military Transcripts: In accordance with the Massachusetts VALOR Act of 2012, admission applicants may submit their military transcript (as appraised by the American Council on Education (ACE)) for consideration of academic credit at the time of acceptance to determine whether the content is transferable into Framingham State University. Framingham State University reviews and evaluates the military transcript for academic credit, based on the recommendations from ACE, for transferability of credit in accordance with our university-wide policy.

## VALOR Act and Academic Credit Evaluation Policy

As per the Valor Act of 2012 (Massachusetts), undergraduate admissions applicants may submit their military transcript via the American Council on Education (ACE) for consideration of academic credit in accordance with University's policy with transfer credit. Framingham State will also review for consideration of academic credit the DANTES DSST exams. This information needs to be provided during the application process to the University. Questions regarding the possible transferability of military credits should be directed to the Office of the University Registrar by email (registrarsoffice@framingham.edu) or by phone (508-626-4545).

## InTERNATIONAL STUDENT ADMISSION

Framingham State University welcomes applications for full-time undergraduate study from international students. An International Student Information Packet may be requested from the Office of Undergraduate Admissions or may be downloaded from the Framingham State University website, www.framingham.edu/admissions. The following steps must be completed before an admissions decision can be made:

1. APPLICATION FORM \& FILING DEADLINES: International students applying for the fall semester (September entrance) are required to complete the entire admissions application process by February $15^{\text {th }}$. Applications from international students studying and/or residing abroad are considered only for entrance in the fall semester. However, international students who have been enrolled in a college or university for at least two full semesters in the United States may apply for the spring semester (January entrance) but must complete the entire admissions application process by December $1^{\text {st }}$.
2. TRANSCRIPTS: All official transcripts from secondary schools and colleges must be sent directly to the Office of Undergraduate Admissions. A certified course-by-course evaluation of foreign credentials must be provided by all transfer applicants and any freshman applicants who have taken university-level work outside of the United States at a university. Students may also be eligible for college credit who have completed Arbitur examinations at the secondary school level, International Baccalaureate (IB) courses, General Certificate of Education (GEC) Advance Level (i.e. "A" level courses in some countries), or Advanced Placement (AP). The certified evaluation must be in English and include grade and/or score and recommended credit hour equivalents for each course. If more than one university or college was attended, official transcripts and certified course-by-course evaluations from each institution must be forwarded to the Office of Undergraduate Admissions by the appropriate deadline.
If you have attended more than one university or college, official transcripts and certified course-by-course evaluations from each institution must be forwarded to the Office of Undergraduate Admissions by the appropriate deadline.
3. STANDARDIZED TESTS:
A. SAT or ACT. Submit official test results from the College Board or ACT. The College Board code number for Framingham State University is 3519. The ACT code number for Framingham State University is 1904. Transfer applicants who have successfully completed at least six (6) semester hours of both college-level English composition and college-level mathematics and have a total of at least 24 credit hours from an American college or university may be exempted from the SAT requirement as well as students who graduated from high school more than 3 years ago. Students who do not submit standardized test scores will be considered under the test optional admission policy.
B. Proof of English Proficiency Students whose native or heritage language is not English must provide sufficient proof of English proficiency by taking and providing official test scores from one of the following exams and achieving the approved minimum score, in parentheses, within the 6 months prior to application submission:

- TOEFL (79 IBT / 550 PBT)
- Pearson-PTE Academic (50)
- Duolingo (100)
- IELTS (6)
- Michigan-MET (55)
- STEP-Eiken (Grade Pre-1)
- ITEP (3.7)
- Cambridge-English / CEFR (B2)

English proficiency testing requirements may be waived, if the applicant has successfully completed at least two (2) full academic years in a college/university where the primary instruction is in English or has successfully completed advanced coursework in the English Language Program (ELP) at Framingham State University or at a comparable, approved partner ESL program at the discretion of the FSU Director of International Recruitment and Director of English Language

Programs and received an instructor's or administrator's letter of recommendation of readiness of English proficiency at the level of approved minimum concordant test scores (see above).
4. CERTIFICATION OF FINANCES: Since the University is not able to provide any financial aid to international students, a Certification of Finances form and supporting documentation must be submitted. This form will be forwarded upon receipt of the application or may be downloaded from the International Applicants section of the FSU website.

NOTE: All students who are not permanent residents or citizens of the United States are required to pay out-of-state tuition. Framingham State University is authorized under Federal law to enroll non-immigrant alien students. Individuals approved for "Deferred Action for Childhood Arrivals" (DACA) may be eligible for in-state tuition.

## DEFERRED ADMISSION

A student may apply for admission and, if accepted, reserve a place for the following year by submitting the required deposit and a written request to the Admissions Committee. Deferred admission is granted with the provision that the applicant will not be enrolled at any other college or university during this interim period without prior approval of the Office of Undergraduate Admissions at Framingham State University.

## NON-TRADITIONAL APPLICANTS

Applicants who have not attended college and who apply for admission more than three (3) years after high school graduation will be evaluated on the basis of their secondary school record, standardized test scores, and a description of activities since leaving high school.

## Studio Art Program Portfolio Requirements

All prospective students for the Studio Art major regardless of concentration are required to submit a portfolio, which is reviewed by the department faculty. Applicants are required to submit their portfolio digitally through SlideRoom [https://framingham.slideroom.com].

The Portfolio should contain 10-15 examples of the strongest and most recent artwork made by the applicant.

The portfolio should include artworks

- Created from direct observation (minimum one self-portrait and one still-life) using a variety of media, techniques, subject matter, and scale.
- Work samples that demonstrate dedication, sustained interest, and artistic development over time.
- Sketchbooks, graphic design work, and experimental pieces are also acceptable.

Application Deadline(s):
Fall Semester - November $15^{\text {th }}$ (Early Action)
-February 15, March $15^{\text {th }}$ (Transfers)
Spring Semester - December $1^{\text {st }}$

## New England Regional Student Program

This program enables residents of Connecticut (CT), Maine (ME), New Hampshire (NH), Rhode Island (RI), and Vermont (VT) to be given a tuition break for designated academic programs at Framingham State University. Subject to legislative funding, eligible students in this program pay a tuition rate $50 \%$ above the Massachusetts In-State tuition. The main eligibility requirement is that the program of study not be offered in a state college or university of the student's state of residence.

| Bachelor's Program of Study at Framingham: |  |
| :--- | :--- |
| State Eligible |  |
| Business and Information Technology | RI |
| Communications Arts | $\mathbf{M E} \bullet \mathbf{R I}$ |
| Criminology | $\mathbf{N H}$ |
| Environment, Society, and Sustainability | $\mathbf{M E}$ |
| Fashion Design | $\mathbf{C T} \bullet \mathbf{M E} \bullet \mathbf{N H} \bullet \mathbf{V T}$ |
| Fashion Merchandising | $\mathbf{C T} \bullet \mathbf{M E} \bullet \mathbf{N H} \bullet$ VT |
| Food Science | $\mathbf{C T} \bullet \mathbf{N H} \bullet \mathbf{R I}$ |
| Health and Wellness | $\mathbf{M E} \bullet \mathbf{N H}$ |
| Hospitality and Tourism Management | $\mathbf{R I}$ |
| Linguistics (American Sign Language) | $\mathbf{C T} \bullet \mathbf{R I} \bullet \mathbf{V T}$ |

For additional information, contact the New England Board of Higher Education (NEBHE) at 45 Temple Place, Boston, MA 02111, tuitionbreak@nebhe.org or call 617-357-9620.

## MASSACHUSETTS DEPARTMENT OF HIGHER EDUCATION (DHE) PROGRAMS

## MASSTRANSFER

Students who enroll in an approved transfer program Fall 2009 or later at Massachusetts state community colleges and maintain a cumulative grade point average of 2.50 may apply to Framingham State University and earn automatic admission to the pre-approved program of study between the Massachusetts State community college and FSU. Additionally, those students who earned a minimum GPA of a 2.00 at time of application but have completed the 34 credit hour MassTransfer General Education Foundation courses may not be eligible for admission into the preferred program of study at FSU but will receive credit for the MassTransfer Block. Those whose cumulative grade point average at the time of completing their associate's degree is a 3.00 or higher in an approved program will be eligible for a $100 \%$ tuition reduction in the Day Division. For more information, please refer to http://www.mass.edu/masstransfer.

Note: Not all majors are available through this program. Students who have previously been matriculated at Framingham State University are not eligible.

## STEM MassTransfer General Education Foundation

The number of General Education (Gen Ed) Foundation courses will be reduced from 34 credits to 28 credits for students in A2B STEM pathways. The reduction will take place in two categories: behavioral and social sciences and humanities and fine arts. Community college students enrolled in A2B STEM pathways will be required to complete at least six (6) credits in each of these categories. The receiving institutions can require up to an additional four courses in order to satisfy their general education requirements.

| Massachusetts Department of Higher Education <br> (DHE) Mass Transfer General Education <br> Foundation |  |  |
| :--- | :---: | :---: |
| Subject Areas | Current | STEM |
| English composition/writing | 6 | 6 |
| Behavioral and social sciences | 9 | 6 |
| Humanities and fine arts | 9 | 6 |
| Natural or physical sciences | 7 | 7 |
| Mathematics/quantitative <br> reasoning | 3 | 3 |
| Total | $\mathbf{3 4}$ | $\mathbf{2 8}$ |

## Massachusetts State College and Community College Elementary and Early Childhood Education Compacts

A student shall be eligible for admission to Framingham State University under the Early
Childhood Education Compact by meeting all of the following conditions:

- Completion of an associate degree at a Massachusetts community college with a minimum of 60 semester hours exclusive of developmental coursework;
- A minimum cumulative grade point average of not less than 2.75 (in a 4.00 system);
- Completion of the designated core curriculum comprised of 45 to 60 semester hours;
- A passing score on the Communication and Literacy Skills Test (CLST) of the Massachusetts Tests for Educator Licensure (MTEL). (Verification of a passing score must be received by Framingham State University prior to enrollment in the Early Childhood Major.)

A student shall be eligible for admission to Framingham State University under the Elementary Education Compact by meeting all of the following conditions:

- Completion of an associate degree at a Massachusetts community college with a minimum of 60 semester hours exclusive of developmental coursework;
- A minimum cumulative grade point average of not less than 2.75 (in a 4.0 system);
- Completion of the designated core curriculum comprised of 44 to 59 semester hours;
- A passing score on the Communication and Literacy Skills Test (CLST) of the Massachusetts Tests for Educator Licensure (MTEL). (Verification of a passing score must be received by Framingham State University prior to enrollment in the Elementary Education Major.)

Please visit the Massachusetts Department of Higher Education website, www.mass.edu, for additional information about the Elementary Education Compact.

## Nursing Education Transfer Compact (NETC)

For Registered Nurses who graduated from public Associate Degree in Nursing Programs in Massachusetts, the NETC includes:

Acceptance in transfer all courses earned as part of a Board of Registration in Nursing (BORN) approved public Associate Degree in Nursing (ADN) program, without time restriction*, as a body of knowledge and practical experience that is a prerequisite to National Council Licensure Examination (NCLEX) licensure. Transfer credit evaluations are completed by the Office of the University Registrar. Registered Nurses may receive credit for nursing and non-nursing college-level courses successfully completed at other regionally-accredited higher education institutions.
As per the Nursing Education Transfer Compact (NETC), nursing students who attended a Massachusetts state community college and have completed the MassTransfer Block (General Education), as indicated as such on the community college transcript, may be required to complete no more than two additional courses at FSU to satisfy FSU's
Domain General Education model. A nursing student who has previously completed a bachelor's degree from a regional-accredited institution in the United States will have FSU's Domain General Education model as completed.
Students who do not meet the General Education requirements through the Mass Transfer Block (General Education) must meet the University's Domain General Education Requirements. See the Framingham State University Undergraduate Catalog for details. Exceptions to this policy may be applied by FSU for specific courses, i.e. sciences.
Note: Applicants to the upper division Nursing program (Registered Nurses (RNs) only) should refer to the Nursing section of the catalog for additional information on requirements.

## ADMISSION TO STUDY FOR A SECOND BACCALAUREATE DEGREE

Individuals, who have previously earned a baccalaureate degree from a regionally-accredited institution, including Framingham State University, may be admitted to study for a second baccalaureate degree. However, the intended bachelor's degree as well as the major program of study must be different from the one already awarded.

If the applicant already holds a Bachelor of Arts (B.A.), they cannot apply to a second B.A. degree. If the applicant already holds a Bachelor of Science (B.S.), they cannot apply to a second B.S. degree. There may be examples where a student has completed a B.A. and would not be eligible to complete a B.S. due to the major program of study the individual has already completed.

Exceptions to the policy:

- Individuals applying to the Bachelor of Science degree, major program in Nursing, are eligible for a second degree regardless of the previously completed baccalaureate degree.
- Individuals applying to the Bachelor of Arts degree, major program in American Sign Language with a concentration in English Interpreting, are eligible for a second degree, even if the student already holds a Bachelor of Arts degree.

The additional following requirements must be met:

1. The student must apply through the Office of Undergraduate Admissions and be interviewed by the Associate Dean of Undergraduate Admissions (or designee).
2. The student is limited to apply only to a major program other than one in which the first degree was received.
3. The student's application to a major program is considered on a space available basis only.
4. The student shall have at least a 2.00 overall final grade point average on their previous degree.
5. The FSU Department Chair of the new major, in conjunction with the University Registrar, will determine which, if any, of those courses taken to meet the requirements of the first degree may be used in meeting the major requirements of the second degree. This generally excludes the program capstone requirement(s).
6. Notwithstanding the above, FSU Course Residency requirements include a minimum of eight (8) course-credits which must be completed in the new major; and a minimum of two (2) semesters of study must be completed at Framingham State University.
7. The student shall be allowed to transfer only those courses for which a grade of C- ( 1.70 on a 4.00 scale) or better was received.
8. The student will be considered exempt from completing the FSU General Education model. The student must meet all other graduation requirements including the residency requirements for degree/major/minor, the thirty-two (32) course-credit minimum, all major requirements, minor requirements (if any), grade point average requirement for both degree and major, etc.
9. For students who have earned their first degree at Framingham State University, the same transcript is to be used and the cumulative grade point average is to be continued.
10. Applicants without a four-year equivalent United States baccalaureate degree are subject to the rules for transfer students.

## Office of the Bursar/Student Accounts

## TUITION AND FEES

Annual Day Division Costs:
Undergraduate Tuition*

| In-State Tuition (residents of Massachusetts) | $\$ 161.67$ per Course credit |
| :--- | ---: |
| New England Regional Tuition (NEBHE) | $\$ 242.50$ per Course credit |
| Out-of-State Tuition (non-residents) | $\$ 1,175.00$ per Course credit |
| International (F-1 Student Visa) | $\$ 1,175.00$ per Course credit |

Graduate Tuition*
In-State Tuition (residents of Massachusetts) $\$ 280.00$ per Course credit
New England Regional Tuition (NEBHE) $\$ 419.00$ per Course credit
Out-of-State Tuition (non-residents) $\quad \$ 1,175.00$ per Course credit
Out-of-State Tuition (non-residents) $\quad \$ 1,175.00$ per Course credit
*Students enrolled for more than three (3) course credits will not be charged additional tuition.

| Fees (subject to change pending FSU Board |
| :--- |
| of Trustees Approval) |
| University Services Fees* |


| Library Fee | $\$ 1,745.83$ per Course credit |
| :--- | ---: |
| Health Center Fee | $\$ 50.00$ per Term |
| Art Studio Fee | $\$ 42.50$ per Term |
| Biology Lab Fee | $\$ 25.00$ per course |
| Chemistry Lab Fee | $\$ 35.00$ per course |
| Parking Decal Fee - Residence Hall Students | $\$ 38.00$ per course |
| Parking Decal Fee - Commuter Students | $\$ 250.00$ per Term |
| $\quad$ Parking Decal Replacement Fee | $\$ 50.00$ per Term |
| Graduation Fee [Upon Applying to Graduate] | $\$ 15.00$ each |
| ID Replacement Fee | $\$ 100.00$ One-time occurrence |
| Senior Citizen Audit Fee Day Division | $\$ 20.00$ per occurrence |
| *Students enrolled for more than three course-credits will have University Services Fees capped |  |
| at $\$ 5237.49$ per semester. |  | \$240 per Course credit

Residence Halls (Varies based on Hall \& Room plus Damage Deposit Required)

Meal Plans (Board) - Both Resident \&
$\$ 4,440.00-\$ 5,440.00$ per Term

Commuter Student options available

Department of Graduate and Continuing Education (DGCE) Costs (subject to change pending FSU Board of Trustees Approval):

| Program | Tuition | Fees | Total Cost Per Course Credit |
| :---: | :---: | :---: | :---: |
| Undergraduate | \$754.00 | \$506.00 | \$1,260 |
| Graduate [Excludes MBA, MSN, PSM] | \$884.00 | \$506.00 | \$1,390 |
| Graduate MBA, MSN, PSM | \$1,084.00 | \$506.00 | \$1,590 |
| Miscellaneous Fees |  |  |  |
| International Student Fee [Graduate] |  | \$1,350.00 per Term |  |
| Graduation Fee [Undergraduate/Graduate] (Upon Applying to Graduate) |  | \$100.00 One-time occurrence |  |
| Art Studio Fee [Undergraduate/Graduate] |  | \$25.00 per Course credit |  |
| Biology Lab Fee [Undergraduate/Graduate] |  | \$35.00 per Course credit |  |
| Chemistry Lab Fee |  | \$38.00 per Course credit |  |

Course Audits - Undergraduate/Graduate

Regular Course Audit Fee - DGCE
Senior Citizen Audit Fee - DGCE
$\$ 1,000.00$ per Course credit
$\$ 350.00$ per Course credit

Note: Summer and Wintersession courses are considered as DGCE courses; standard tuition and fees apply.

Day Division students are billed on a fall or spring term basis. To view the Term charges in detail, go to the Office of the Bursar/Student Accounts on www.framingham.edu and select the link to "All About Tuition and Fees". All charges listed within the document refer to one term unless noted otherwise. For fall terms, students are issued eBills in early July with payment due before the early August. Students may view and pay their fall term bill through www.my.Framingham.edu, the University's portal. For the Spring term, students are issued eBills in the third week of November with payment due the first week of December. An email notification is sent each time a new eBill is available. Note: The schedule of fees, tuition, methods of payment, and refund policies are those in effect at the time of publication. They are subject to change without notice.

Students taking more than three (3) Day Division course credits will be charged the same amount as those taking only three (3) Day Division course credits. This means that in the Day Division, enrolling in a $4^{\text {th }}$ or $5^{\text {th }}$ Day Division course, no additional tuition and fees are applied. Miscellaneous course fees may still apply for those courses with an Art Studio or science lab fee.

Senior citizens are charged $\$ 240.00$ per course-credit for auditing Day Division courses.
Master's Candidates as well as Post Baccalaureate Teacher Licensure (PBTL) students are charged the Graduate Tuition rate for courses taken through the Day Division. Please refer to the "All About Tuition and Fees" for a listing of the charges associated with course enrollment.

In accordance with Massachusetts Board of Higher Education Policy No. FAAP 97-28, students may be subject to additional tuition charges per course credit if taking thirty-eight or more state-supported course credits at Framingham State University.

## STUDENT FINANCIAL RESPONSIBILITIES AGREEMENT

The Student Financial Responsibilities Agreement (SFRA) is a contract between you, the student, and Framingham State University, which outlines your financial obligation when registering for courses at FSU. When agreeing to the SFRA, you are authorizing the University to charge any tuition, fees, costs, interest or other charges to your student account, as a result of course registration/enrollment. After the start of the term, dropping or withdrawing from a course may still result in charges.

## ENROLLMENT STATUS

A student's final enrollment status is determined following the end of the Course Add/Drop period and is based on the total number of courses enrolled in at the institution. Verification of enrollment status for all students is done by the Office of the University Registrar.

## UNIVERSITY HEALTH INSURANCE

Massachusetts State law requires all full-time students attending Framingham State University to have health insurance. Part-time students are not eligible to purchase the health insurance offered by the University.
Any student enrolled in three (3) or more course-credits at the University - Day Division or Department of Graduate and Continuing Education (DGCE) or a combination of both will be charged for annual health insurance coverage. Matriculated graduate students enrolled in two (2) graduate-level courses are considered full-time and will be required to have health insurance.
Students must either waive or enroll in the Health Insurance plan offered by the University (08/01/23 to 07/31/24). If the student already has health insurance coverage, then a health insurance waiver must be submitted on-line through myFramingham, the University's portal. The Health Insurance Requirement link may be found on the Student Accounts section.
Students have until September 30, 2024 to submit the Waiver, else the student will be automatically enrolled into the Health Insurance plan offered by the University and will be responsible for the payment of $\$ 3,779.00$. Part-time students are not eligible to purchase the health insurance offered by the University.

## PAYMENTS

Each student must arrange for the payment of all charges by the beginning of each term. This includes notification to the University of any applicable loans, grants, or other outside sources of funding and either (1) payment in full of any remaining balance or (2) agreement to a payment plan. Failure to do so may result in loss of classes, residence hall reservation, and/or parking assignment. In addition, a Hold for overdue balance may be placed on the student's account that prevents the student from registering for courses and a $\$ 100.00$ late fee may be charged. Every full-time student is enrolled in and charged for the health insurance offered by the University unless they file a waiver showing proof of insurance. Please refer to the Office of the Bursar/Student Accounts website for information about how to make payments.
For all new students, there is a $\$ 150.00$ non-refundable tuition deposit. Such deposit shall be credited to the student's first term tuition charge.
There is a $\$ 150.00$ non-refundable deposit for all residence hall students, both First-Years and transfers, payable at the time of admission. Continuing students pay at the time of room selection. The deposit shall be credited to the spring term residence hall charge. Students who stay one night or longer in a residence hall will not be entitled to a refund. A meal plan must be selected by all residence hall students.

A residence hall damage deposit of $\$ 100.00$, is required at the beginning of the first term of residency each year. Refunds are made at the end of each academic year after an assessment for any damages, provided that there is no outstanding balance on the student's account. Commuting students are required to have a parking decal for any vehicle brought to the campus. There is a $\$ 50.00$ per term charge for this decal, charged at a $\$ 100.00$ annual rate if purchased before or during the fall semester. A $\$ 20.00$ fee will be charged for replacement of a student ID card. Residence hall students may apply for resident parking (based on availability) at the cost of $\$ 500.00$ annually.

Students who have not satisfied their Student eBill will not be issued transcripts, diploma, or be permitted to register for any courses.

## HOLDS FOR OVERDUE BALANCES

A Hold prevents a student from registering, dropping, or withdrawing from courses. State regulations have informed the setting of a minimum threshold for the placement of Holds for any accounts with an overdue balance. A Hold may be temporarily suspended for the purpose of taking registration action on courses in the current semester. An affected student should contact the Office of the Bursar/Student Accounts. In attempting to collect overdue account charges, the University will adhere to all applicable federal and state laws and current policies of the Massachusetts Department of Higher Education (DHE) and the Office of the Comptroller.

## MONTHLY PAYMENT OPTION

To enroll in a payment plan, go to the e-pay portal on your myFramingham account, then select the "Payment Plans" button at the top. This will bring you to the page where you can enroll in FSU's payment plan.

Fall Payment Plan Schedule:
5-month plan: July 1st - November 1st
4-month plan: August 1st - November 1st
Spring Payment Plan Schedule:
5-month plan: December 1st - April 1st
4-month plan: January 1st - April 1st
*Please note: You can only sign up for the 4-month plan if the 1st payment of the term has passed. All others must sign up for the 5 -month plan

## REFUND POLICY - DAY DIVISION

## Withdrawal or Leave of Absence (LOA) from the University

If a student is separating from the University on or after the first day of the Term, the student must submit a completed "Notification of Withdrawal from University" or "Request for Leave of Absence" form to the Office of the University Registrar.

For a student withdrawing from the University, the refund percentages below apply to tuition and fees. Excluded from this policy are: the tuition deposit, the residence hall deposit, the resident parking deposit and fee, returned check fee(s), the health insurance premium, and any other use or penalty fees which are non-refundable.

All refunds will be made by direct deposit to the checking or savings account set up by the student on the eRefund tab in my.Framingham.

Fall 2024 - Day Division Refund Policy

| Refundable Tuition \& Fees Date | Refund <br> Percentage |
| :--- | :---: |
| On or Before September 13, 2024 | $100 \%$ |
| Thru September 20, 2024 | $80 \%$ |
| Thru September 27, 2024 | $60 \%$ |
| Thru October 4, 2024 | $40 \%$ |
| After October 4, 2024 | $0 \%$ |

Spring 2025

| Refundable Tuition \& Fees Date | Refund <br> Percentage |
| :--- | :---: |
| On or Before January 23, 2025 | $100 \%$ |
| Thru January 30, 2025 | $80 \%$ |
| Thru February 6, 2025 | $60 \%$ |
| Thru February 13, 2025 | $40 \%$ |
| After February 13, 2025 | $0 \%$ |

Please note that Federal regulations require that students who have received federal financial aid funds will also be eligible to receive the daily percentage of Federal funds, based upon the student's official date of withdrawal. If the student does not submit a "Notification of Withdrawal" form and the University determines that the student has withdrawn, the student will only be eligible to receive up to $50 \%$ of the Federal financial aid funds. The student will be responsible for paying any balance due the University if financial aid funds are reduced.

## Withdraw from the Residence Hall

The student should so indicate on myFramingham for the Fall semester. On or after the first day of classes, there is no refund of residence hall rent for a student who withdraws from the residence hall. The residence hall deposit is non-refundable. A refund of the residence hall damage deposit is made at the end of each academic year after an assessment for any damages. Please note that withdrawal from a residence hall does not automatically withdraw the student from the meal plan. The resident parking fee is non-refundable. The Office of Residence Life can answer questions regarding housing policies.

## Withdraw from the Meal Plan

The student should do so on myFramingham. All residence hall students must have a meal plan. On or after the first day of classes, the student must go to the Dining Services Office, located in the McCarthy University Center, and complete a form to withdraw from the meal plan. Absolutely no refunds will be issued without a completed form. The change percentage is prorated on a daily basis through $60 \%$ of the term. Any change to a lesser meal plan must be made at the Dining Services Office prior to the end of the Course Add/Drop period.

## REFUND POLICY - GRADUATE AND CONTINUING EDUCATION (DGCE)

| Students who: | Are Refunded: |
| :---: | :---: |
| Drop the course Prior to or on the 1st day of the Term. | 100\% |
| Withdraw from the course after the $6^{\text {th }}$ day of the Term but prior to the $13^{\text {th }}$ day of the term. | $90 \%$ of the Tuition. No Fees are refundable. |
| Withdraw from the course after the $12^{\text {th }}$ day of the Term but prior to the $19^{\text {th }}$ day of the term. | $50 \%$ of the Tuition. No Fees are refundable. |
| Withdraw from the course after the $18^{\text {th }}$ day of the Term. | No Refund. |

## MASSACHUSETTS DEPARTMENT OF HIGHER EDUCATION - OFFICE OF STUDENT FINANCIAL ASSISTANCE

## Categorical Tuition Waivers

Categorical Tuition waivers will be accepted for those who qualify as Massachusetts residents age 60 and over; or as Native Americans; or as Veterans or as members of the Massachusetts National Guard. These waivers must be submitted to and by approved/processed by the Office of the University Registrar prior to the start of each term.

## Graduate Tuition Waivers

Graduate Tuition waivers will be accepted for those who are matriculated students in a Master's program or Post- Baccalaureate Teacher's Licensure (PBTL) program and are enrolled in Day Division courses. These waivers must be submitted to and by approved/processed by the Office of the University Registrar prior to the start of each term.

## FRAMINGHAM STATE UNIVERSITY - INSTITUTIONAL

## GEOGRAPHIC TUITION GRANT

Any matriculated undergraduate domestic student who is not a resident of Massachusetts or on an F-1 Visa admitted to the University attending through the Day Division will be charged the Out-of-State Tuition rate for each semester enrolled.
Eligibility for this Geographic Tuition Grant is based on the student not having access to a Bachelor's degree-granting public institution within a 500-mile radius of the student's home town/city. The student must complete and submit the request form to the Office of the University Registrar by the start of their first semester that they are admitted into the University.

If determined eligible, a Geographic Tuition Grant will be applied to the student's semester tuition charges. The student would then be responsible for the current published In-State tuition amount and all Fees for the semester. The student will be classified as an Out-of-State Resident for tuition purposes but will have the Geographic Tuition Grant Program attribute in order to track and apply the Grant each semester.

## VA PENDING PAYMENT COMPLIANCE POLICY

In accordance with Title 38 US Code 3679 subsection (e), Framingham State University has adopted the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. Framingham State University will not:

- Prevent nor delay the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, libraries, or other institutional facilities.
However, to qualify for this provision, such students may be required to:
- Produce the Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.


## YELLOW RIBBON PROGRAM - VETERANS BENEFITS

Students that are $100 \%$ eligible for Chapter 33 Post $9 / 11$ benefits and are being charged Out-of-State tuition may be eligible to receive funding via the Yellow Ribbon program. The maximum Yellow Ribbon funding amount per student per year is:

Undergraduate students $\$ 3,040$
Graduate students $\quad \$ 2,685$

[^0]
## Office of the University Registrar

## IN-STATE TUITION RESIDENCY CLASSIFICATION FOR DAY DIVISION

Rules and Regulations Governing the Tuition Residency Status of Students for In-State Tuition Purposes administered by the Office of the University Registrar.
These rules and regulations, approved in 2016 by the University, and current as of publication, apply to the classification of students at Framingham State University as Massachusetts or non-Massachusetts students for tuition purposes. The Massachusetts Board of Higher Education (BHE) may revise this policy. In that event, the revised BHE policy will supersede the following. In the event the Tuition Residency Form is not submitted prior to the semester of matriculation, the student's classification will be set to out-of-state retroactive to the semester of matriculation resulting in out-of-state tuition charges being assessed.

## Part I. Definitions

1.1 "Academic period" shall mean a term or semester in an academic year or a summer session, as prescribed by the Framingham State University Board of Trustees or under their authority.
1.2 "Continuous attendance" shall mean enrollment at the University for the normal academic year in each calendar year; or the appropriate portion or portions of such academic year as prescribed by the Board of Trustees or under their authority.
1.3 "Eligible person" shall mean a United States citizen, lawful immigrant, permanent resident or holder of another legal immigration status, or is eligible to apply and has applied for such status; who has satisfied the durational residency requirement and can demonstrate his/her intent to remain in Massachusetts.
1.4 "Emancipated person," for the purposes of residency classification for tuition, shall mean a person who has attained the age of 18 years and is financially independent of his or her parents, or if under 18 years of age:
a) whose parents have entirely surrendered the right to the care, custody, and earnings of such person and who no longer are under any legal obligation to support or maintain such person;
b) a person who is legally married;
c) a person who has no parent.

If none of the aforesaid definitions apply, said person shall be deemed an "unemancipated person."
1.5 "Parent" shall mean:
a) the person's father and mother, jointly;
b) if the person's father is deceased, the person's mother; if the person's mother is deceased, the person's father;
c) if a legal guardian has been appointed by a court having jurisdiction, the legal guardian;
d) if neither the father nor mother is living and no legal guardian has been appointed, the person who then stands in loco parentis to the person;
e) if the father and mother are divorced, separated or unmarried, the parent who has been awarded legal custody of the person; or if legal custody has not been awarded, the parent with whom the person lives. With respect to any adopted student, the word "adoptive" should be inserted before the words "father" and "mother" wherever used.
1.6 "Reside," "residency" or "resident" shall mean "domicile," i.e., a person's true, fixed and permanent home or place of habitation, where he or she intends to remain permanently.

## Part II. Classification

2.1 For the purpose of assessing tuition, each student shall be classified as a "Massachusetts resident" or a "non-Massachusetts resident." A person shall be classified as a Massachusetts resident if he or she (or the parent of an unemancipated student) shall have resided in the Commonwealth of Massachusetts for purposes other than attending an educational institution (public or private) for twelve months immediately preceding the student's entry or reentry as a student.
2.2 Physical presence for this entire twelve-month period need not be required as long as the conduct of an individual, taken in total, manifests an intention to make Massachusetts his or her permanent dwelling place. However, residency is not acquired by mere physical presence in Massachusetts while the person is enrolled in an institution of higher education (public or private).

## Part III. Determination of Residency

3.1 Proof of Residency
a) Each case will be decided on the basis of all facts submitted with qualitative rather than quantitative emphasis. A number of factors are required for residency to determine the intention of the person to maintain permanent residence in Massachusetts. No single index is decisive. The burden of proof rests on the student seeking classification as a Massachusetts resident.
b) The following shall be primary indicia of residency:

1) The unemancipated persons, the residency of parents, having custody, within Massachusetts:
2) Copies of both federal and state income tax returns including W-2 forms;
3) Permanent employment in a position not normally filled by a student;
4) Reliance on Massachusetts sources for financial support;
5) Former residency in Massachusetts and maintenance of significant connections therein while absent.
c) The following shall be secondary indicia of residency, to be considered of less weight than the indicia listed above in subsection b):
6) Continuous physical presence in Massachusetts during periods when not an enrolled student;
7) Military home of record;
8) All other material of whatever kind or source, which may have a bearing on determining residency (such as motor vehicle registration and operator's license and vehicle insurance policy benefits page).
3.2 Proof of Emancipation.

A student asserting that he or she is an emancipated person shall furnish evidence to support such assertion. Such evidence may include:
a) Birth certificate or any other legal document that shows place and date of birth;
b) Legal guardianship papers - court appointment and termination must be submitted;
c) Statements of the person, his or her parent(s), guardian(s), or others certifying no financial support;
d) Certified copies of federal and state income tax returns filed by the person and his or her parent(s);
e) Where none of the foregoing can be provided an affidavit of the emancipated person in explanation thereof and stating fully the grounds supporting the claim of emancipation.
3.3 Presumptions
a) Residency is not acquired by mere physical presence in Massachusetts while the person is enrolled in an institution of higher education. (See Section 2)
b) A person having his or her residency elsewhere than in Massachusetts shall not be eligible for classification as a Massachusetts resident for tuition purposes except as herein provided:

1) Any person who is registered at the University as a Massachusetts resident shall be eligible for continued classification as a Massachusetts resident for tuition purposes (until attainment of the degree for which he or she is enrolled) during continuous attendance at the institution.
2) The spouse of any person who is classified or is eligible for classification as a Massachusetts resident is likewise eligible for classification as a Massachusetts resident. This provision will not apply in the case of a spouse in the United States on a non-immigrant visa.
3) A person who is a lawful immigrant/permanent resident of the United States (or is eligible to apply and has applied for such status) is eligible to be considered for Massachusetts residency for tuition purposes provided that he/she meets the same requirements for establishing residency in Massachusetts as are required of a United States citizen.
A Non-citizen who is in refugee/asylum status are likewise eligible to be considered for Massachusetts residency for tuition purposes provided that he/she meets the same requirements for establishing residency in Massachusetts as are required of a United States citizen. A non-citizen must provide appropriate United States Citizenship and Immigration Services documentation to verify his/her status. NOTE: A student attending the University on a non-immigrant visa (A through $T$ ) is not eligible for Massachusetts In-State tuition unless the student is eligible and has applied for lawful immigrant status (documentation of such actions will be required).
4) Those students whose higher educational pursuits are funded by the Massachusetts Department of Institutional Assistance, the Massachusetts Rehabilitation Commission, or any of the other Commonwealth of Massachusetts public assistance programs.
c) A person does not gain or lose in-state status solely by reason of his or her presence in any state or country while a member of the Armed Forces of the United States.
d) For the purposes of this policy the following persons shall be presumed to be Massachusetts residents:
5) The student meets the qualifications for In-State Tuition under Federal Public Law 113-146 (The Veterans Access, Choice, and Accountability Act of 2014).

## Part IV. Appeals and Reclassification

4.1 In any case where the Admissions Office is unable to make a determination prior to initial enrollment based on the evidence submitted, the applicant may be required to submit a "Tuition Residency Reclassification Form" to the University Registrar for review before residency classification is finalized.
4.2 Any student or applicant who is unwilling to accept the initial ruling relative to his or her residency classification, or who wishes to seek reclassification may a file a "Tuition Residency Reclassification Form."
4.3 Any student or applicant who is unwilling to accept the ruling relative to his or her residency after submitting a Tuition Residency Reclassification Form" may submit a written appeal to the Vice President for Enrollment \& Student Development or his/her designee. The decision on appeal is final and may not be appealed further.
(i) 4.4 Retroactive Effect: Any change in a student's classification as the result of a request for reclassification or an appeal will be retroactive only to the beginning of the semester during which the institution makes the final decision to reclassify the student.
(ii) Part V. Penalties

Misrepresentation in or omission from any evidence submitted with respect to any fact which, if correctly or completely stated, would be grounds to deny classification as a Massachusetts resident (for tuition purposes), shall be cause for exclusion or expulsion from or other disciplinary action by the institution.

## Office of Financial Aid

The Office of Financial Aid at Framingham State University exists in order to assist students and their families in meeting the costs of a college education. Framingham State University participates in a variety of federal, state, institutional, and private financial aid programs.

## General Eligibility Requirements

In order to be eligible for financial aid at Framingham State University, an applicant must be a United States citizen or an eligible non-citizen enrolled (or accepted for enrollment) in a degree program at Framingham State University. Additionally, the applicant must be maintaining satisfactory academic progress towards a degree, must be in compliance with the Selective Service Law, must not be in default on any educational loans or owe a refund on any federal grants to any institution, and must have all documents required for a completed financial aid application on file in the Office of Financial Aid.

## How to Apply for Financial Aid

In order to be given priority consideration for financial aid, a Free Application for Federal Student Aid (FAFSA), or a renewal FAFSA, if the student is a current aid recipient, should be filed at www.fafsa.gov by March $1^{\text {st }}$. Students must include Framingham State University's FICE (Federal Interagency Committee on Education) school code number: 002185.

Additional documents may be required for students who are selected for verification by the Federal Government. These documents include completing the Internal Revenue Service (IRS) data retrieval process for parent and student or providing official IRS tax transcripts, a verification worksheet and other documents as requested. Students will be contacted if this information is required.

## Financial Aid Awards

Once financial aid eligibility is determined, a financial aid package is prepared. The package may be a combination of grant, work, and/or loan programs. The following is a list of the most common programs.
Visit www.framingham.edu/financialaid for more information.
The amount of financial aid eligibility that is met depends upon the availability of funds, the number of eligible applicants, the date the FAFSA is filed and the financial aid file is completed. FAFSAs received by March $1^{\text {st }}$ will be given priority consideration, while files completed after that date are subject to available funding. A financial aid award letter will be mailed to all students who complete an application for financial aid.

It is the responsibility of the student to notify the Financial Aid Office of all financial assistance received from any other sources. Types of assistance that must be reported include private scholarships, tuition waivers, veteran's benefits, Massachusetts Rehabilitation assistance, etc.

All forms of outside assistance must be considered in the financial aid package. Outside assistance received after the awards are made by the Financial Aid Office may cause the financial aid package to be adjusted.

## Financial Aid Special Circumstances Appeals

Financial decisions can be appealed if the family situation changes after the financial aid award has been made. Students must complete a Special Circumstances Appeal Request Form available at the Office of Financial Aid or found on the Office's web pages. Grounds for an appeal may include, but are not limited to: loss of job, loss of other income, death in the family, divorce or separation in the family, or unusually high medical bills. All appeals are handled on an individual basis.

## Grant Programs:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Financial Aid Tuition Waiver
- Framingham State University Grant
- Framingham State University Fee Grant
- MASS Grant


## Work Programs:

- Federal Work Study
- Student Payroll Employment


## Student Loans:

- Federal Direct Subsidized Loan
- Federal Direct Unsubsidized Loan
- Massachusetts No Interest Loan (NIL)
- National Student Loan Data System (NSLDS)


## Parent Loans:

- Federal PLUS Loan


## Framingham State University Scholarships:

- AHANA
- Alumni Association Leadership
- Barbara Thayer Brown
- Marjorie Morgan Brown
- Adelina Acchione Cellucci
- Marco Charles
- Dr. Arthur G. Chaves
- Class of 1954
- Class of 1993 Leadership
- Dr. Gail E. Cosgrove
- Dr. Philip M. Dooher
- Dr. Arthur M. Doyle
- Catherine Fuller
- Priscilla Galvin Sociology
- Lucy Marcille Gillis
- Dr. Alice M. Glover
- Anita M. Goldner
- Sidney \& Katherine Goodstein
- Louise Guild Nutrition \& Biochemistry
- Nancy Murphy Hatch
- Carmela Hilbert Immigrant
- Margaret Fenwick Hinchcliffe
- Dr. Constance B. Jordan
- Mancuso English, Humanities, and Social \&


## Behavioral Sciences

- Robert J. Lemieux Metrowest
- Dr. Diane L. Lowe
- Susan B. Lyman
- Joan Kelleher Martinuzzi
- Christa Corrigan McAuliffe
- Louisa A. Nicholass
- Ruth Pfeiffer
- Dr. Kenneth J. Preskenis
- Dr. Elmer W. Salenius
- Doris Butler Sutton
- Beth El Tzedek
- Jose B. Tombs
- War and Peace Class of 1945
- Dr. Charles Zapsalis

Some programs are subject to the availability of funding.

## Payment of Financial Aid Awards

Financial Aid awarded prior to the due date of the student bill, excluding Federal Work Study, will be posted directly to the student's account.

If more aid is awarded than is required to meet the financial obligation to the University, the student will be refunded this amount and it can be used to meet other educational expenses. Financial aid refunds are not usually available until the mid-point of the term. It is the policy of the Business Office to credit the first money received to the student bill. A student who withdraws from the University during the term may not be eligible for the entire financial aid award. The refund policy of the University is included with the Student Bill in the All About Tuition and Fees document and can be viewed online.

## Satisfactory Academic Progress Policy

Federal regulations require Framingham State University to develop and apply a consistent and reasonable standard of academic progress, which must contain elements specified in the regulations. The following standards apply to any student receiving Federal or State financial aid.

## Grade Point Average Standards

Students must meet FSU academic standards by earning an overall grade point average (GPA) of 1.70 until they have passed 8 course-credits ( 32 semester hours), and a overall GPA of 2.00 after that, or after four (4) semesters (excluding winter intercession but including summer courses) at FSU (whichever comes first).

## Pace of Completion and Maximum Timeframe

The maximum time frame for completing an undergraduate degree is $150 \%$ of the published length of the program. To ensure that students meet this requirement, schools must measure how many courses students complete against how many they attempt. To be making satisfactory academic progress at FSU, students must successfully complete $67 \%$ of the courses attempted. This is a cumulative measurement, and the number of courses attempted and earned will be reviewed at the end of each year at the conclusion of the spring semester.

Since a degree at FSU requires 32 course-credits ( 128 semester hours), 48 course-credits ( 192 semester hours) is the maximum amount that students can attempt within the $150 \%$ completion time frame. Students who have attempted 48 course-credits (including semester hour credits transferred to FSU that count toward the student's degree program) and have not yet earned a Bachelor's degree will become ineligible for financial aid.
Courses transferred to FSU are counted towards the number of course credits/semester hours attempted and completed but are not included in the calculation of the GPA.

## Examples:

A student has taken a total of 30 course credits ( 120 semester hours) and passed 18 course credits ( 72 semester hours). The student is not making satisfactory progress because the student is passing at the rate of $60 \%$ (18 divided by 30 ).
A student has attempted 40 course credits ( 160 semester hours) at FSU and has transferred in 10 course credits ( 40 semester hours) from another institution, but has not yet earned a degree. The student is not eligible for financial aid because the student has attempted 50 course credits ( 200 semester hours), or more than $150 \%$ of the allowable amount for the program.

## Additional Elements

Course Withdrawals: If a student withdraws from one or more courses before the end of the Add/Drop period, the course(s) will not be counted as a course attempt. Any courses dropped with a notation of 'W' (Withdrawn) after the Course Add/Drop period will be counted as credits attempted for determining academic progress.
Incompletes: A grade of incomplete will count as an attempted course. Once the course work is completed and a grade is determined, the completion rate and GPA may change based on the grade that is earned. The time frame to remedy an incomplete grade for satisfactory progress is the same as that for all students (see the Incomplete Grade Policy in the Academic Regulations section of this catalog).

Repeated courses: Courses taken more than once will count as attempted courses for each attempt, but will count only once as earned course credit toward degree completion. Please note that additional federal regulations restrict the number of courses that students can repeat while receiving financial aid. Please contact the Financial Aid Office if you plan to repeat courses.

Non-credit courses: Non-credit courses are acceptable as courses attempted and courses earned.

## Standards are Cumulative

Satisfactory academic progress standards are cumulative and include all periods of the student's enrollment, including those for which the student did not receive financial aid.

## Financial Aid Appeal Process

Students who are not making Satisfactory Academic Progress may appeal in writing to the Financial Aid Office. The appeal should include a detailed account of why the student did not meet the required academic standards and should include any information on special circumstances that may have affected the student's academic performance. Examples of special circumstances include but are not limited to: an injury to a student, an illness of the student, or the death of a close relative of the student. The appeal should also include information on what has changed to allow the student to make satisfactory academic progress in the future.
If a student's appeal is approved, they will receive a semester of financial aid probation, and may also be placed on an academic plan. Academic progress will be checked again at the end of the probationary semester.

## Reinstatement of Financial Aid

If financial aid is lost because satisfactory progress has not been achieved, some ways that the student can repair his or her record over time include:

- Raising the cumulative GPA to the required level
- Raising the completion rate to the required level by earning passing grades in all attempted courses
- Successfully appealing and improving academic performance while on Financial Aid Probation or adhering to the requirements of the assigned academic plan.
Although satisfactory progress is monitored once per year at the conclusion of the spring semester, eligibility may be restored at any time throughout the year. If a student's GPA or completion rate changes due to grade changes, repeated courses, or courses transferred in from other schools, the student should notify the Financial Aid Office.


## OFFICES OF VETERANS SERVICES \& UNIVERSITY REGISTRAR

Framingham State University is approved by the Commonwealth of Massachusetts for veterans' benefits, and for the education of veterans, war orphans, and the dependents of $100 \%$ disabled veterans.

When filing for benefits at the University, eligible veterans are required to submit a copy of their Certificate of Eligibility or other applicable federal government documentation.
The University seeks to provide assistance in obtaining benefits, financial aid, and other services for full and part-time students. Filing the chapter benefits is done through the Office of Veteran Services and certification of enrollment is done through the Offices of the University Registrar.

## Categorical Tuition Waiver for Veterans and Active Duty Members

To be eligible for a Categorical Tuition Waiver, a student must:

- Be a permanent legal resident of Massachusetts for at least one year prior to the opening of the academic year;
- Be a United States citizen or eligible noncitizen;
- Be in compliance with applicable Selective Service Registration laws;
- Not be in default of any federal or state student loan or owe a refund on any previously received financial aid;
- Present documentation of categorical tuition waiver eligibility to the Office of the University Registrar;
- Enroll in at least three undergraduate course-credits per semester in a statesupported undergraduate degree or certificate program; and
- Maintain satisfactory academic progress in accordance with federal and institutional standards.
- Be a member of an eligible category as defined below:

Veteran: As provided in M.G.L. Chapter 4, Section 7(43), shall mean: (1) any person whose last discharge or release was under honorable conditions, and who served for not less than 180 days active service;
or
(2) Any person whose last discharge or release was under honorable conditions and who served in the army, navy, marine corps, coast guard, or air force of the United States, or on full time national guard duty under Titles 10 or 32 of the United States Code or under sections 38,40 and 41 of chapter 33 for not less than 90 days active service, at least 1 day of which was for wartime service, including: Spanish War, World War I, World War II, Korean, Vietnam, Lebanese peace keeping force, Grenada rescue mission, the Panamanian intervention force, or the Persian Gulf. For purposes of the categorical tuition waivers, "veteran" shall also include any individual who served for not less than ninety days at least one of which was served in theatre for "Operation Restore Hope" and whose last discharge or release was under honorable conditions.

Armed Forces: An active member of the Army, Navy, Marine, Air Force or Coast Guard stationed and residing in Massachusetts.

Unlike the G.I. Bill ${ }^{\circledR}$, the Categorical Tuition Waiver does not expire. Assistance can continue as long as the student meets the eligibility criteria. Specific definitions of "veteran" in each category can be obtained from the Office of the University Registrar. Those who are eligible must complete and submit a Certificate of Tuition Waiver Form, along with a copy of their Certificate of Eligibility or other applicable federal government documentation displaying their separation from service (DD214) and proof of Massachusetts residency, prior to the billing deadline. Request for the Wavier must be submitted prior to billing each semester. Veterans not requesting the Waiver will be charged tuition. A refund will be processed upon receipt and approval of the Waiver.

[^1]
## Massachusetts National Guard Tuition Waiver and Federal Tuition Assistance Program

The Massachusetts National Guard Education Assistance Program provides a $100 \%$ tuition and fee waiver for active members of the Massachusetts Army National Guard attending a state university or community college program. Assistance can continue as long as the student is in good academic standing and until they have reached 130 semester hours.

To apply, the student must request a Certificate of Eligibility (TAGMA Form 621-3) every semester from the Massachusetts National Guard Education Office by calling that office at 508-968-5889.

## Veterans Access, Choice, and Accountability Act of 2014

The Veterans Access, Choice, and Accountability Act of 2014 (Public Law 113-146) changed the amount of tuition and fee charges which can be reported to the U.S. Department of Veterans Affairs (VA). Effective July 1, 2015, public institutions of higher education must charge qualifying veterans and dependents tuition and fees at the rate for in-state residents. Any institution not meeting this requirement will be disapproved by VA for the Post-9/11 GI Bill ${ }^{\circledR}$ and Montgomery GI Bill ${ }^{\circledR}$.

Individuals qualifying for in-state tuition under Public Law 113-146 are:

- A Veteran receiving benefits under the Montgomery GI Bill ${ }^{\circledR}$ (Chapter 30) or the Post-9/11 GI $\mathrm{Bill}^{\circledR}$ (Chapter 33) who lives in the state in which the institution is located (regardless of his/her legal state of residence).
- A spouse or child using transferred benefits under the Post-9/11 GI Bill ${ }^{\circledR}$ (Chapter 33) who lives in the state in which the institution is located (regardless of his/her legal state of residence).
- A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship who lives in the state in which the institution is located (regardless of his/her legal state of residence).


## Isakson and Roe Veterans Health Care and Benefits Improvement Act of 2020 (Public Law 116-315, which modifies 38 U.S.C. 3679(c).

The amendment requires that for all courses, semesters, or terms beginning after August 1, 2021, public institutions of higher education must charge qualifying veterans, dependents, and eligible individuals the tuition and fees at the rate for in-state residents.

Section 1010 (Effective: August 1, 2021). Verification of enrollment to receive Post-9/11 Educational Assistance benefits creates a dual certification for the receipt of Post-9/11 GI Bill® benefits. The school will certify the student's enrollment after the add-drop date, and then each month thereafter, the student would be required to electronically verify with VA their continued enrollment in that school. If a student fails to certify for two consecutive months, VA will withhold monthly housing allowance payments until the student certifies.

## YELLOW RIBBON PROGRAM - VETERANS BENEFITS

Students that are $100 \%$ eligible for Chapter 33 Post $9 / 11$ benefits and are being charged Out-of-State tuition may be eligible to receive funding via the Yellow Ribbon program. The maximum Yellow Ribbon funding amount per student per year is:

| Undergraduate students | $\$ 3,040$ |
| :--- | :--- |
| Graduate students | $\$ 2,685$ |

## Academic Regulations


#### Abstract

ABSENCE BECAUSE OF RELIGIOUS BELIEFS "Any student in an educational or vocational training institution, other than a religious or denominational educational or vocational training institution, who is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirement on a particular day, shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study or work requirement which he may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school. No fees of any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section." (Massachusetts General Laws, Chapter 151C, Section 2B).


## CLASSROOM CONDUCT POLICY

## Preamble

Framingham State University supports the principles of freedom of expression for both faculty and students. In order to maintain these principles, all students and course instructors are entitled to a safe, positive, and constructive teaching and learning environment. Disruptive or dangerous behaviors in classrooms and other academic settings can disturb teaching and learning, and these behaviors will not be tolerated. Any individual who engages in disruptive or dangerous behaviors in classrooms may be subject to disciplinary action in accordance with the Classroom Conduct Policy found in the University undergraduate catalog.

## Consistent with the principles described in the FSU Student Code of Conduct:

"The University has the power and responsibility to take proper disciplinary action against students whose behavior threatens or disrupts the mission of the University. This is the general principle governing the jurisdiction of the disciplinary authorities of the University. It means that the disciplinary powers of the University extend to behavior that disrupts the educational process and other activities that are recognized as the lawful mission of the University. It also means that it extends to behavior that violates the peace and order of the University in such a manner that members of the University cannot go about their proper business secure in their persons and property."
This policy applies to all learning environments and modalities including the traditional classroom, online courses, laboratory settings, practicum and internship assignments and University sponsored off-campus learning activities ("field trips").

Examples of disruptive or dangerous language and/or behavior, consistent with those noted in the Student Code of Conduct, are listed below and may be addressed and restricted to the extent that the behavior interferes with the teaching and learning process. This is not an exhaustive list. Faculty are encouraged to include language about expectations for classroom conduct in their syllabi and may choose to use these examples at their discretion.

- The use of derogatory, vulgar, and insulting language directed at an individual or group.
- Unsolicited, disruptive talking, noises, or behaviors in class, such as crosstalk or carrying on side conversations.
- Engagement in unyielding argument or debate. Frequent interruptions of the course instructor or students.
- Making rude, disrespectful, or inappropriate comments in class.
- Disruptive or distracting use of mobile technology or laptops that is not related to a classroom or academic activity.
- The failure to comply with a reasonable request made by a course instructor.

Examples of Disruptive Behaviors Associated with online/hybrid classes - consistent with the University's Acceptable Use Policy.

- Posting rude, disrespectful, offensive, or inappropriate comments, photos, or videos on discussion boards.
- Unauthorized sharing of information posted in a course discussion board
- Intentionally posting links to websites that are not relevant or helpful to the course materials.
- Any violation of the University's Acceptable Use Policy.

Examples of Dangerous Behavior

- Violations of the FSU Student Code of Conduct that occur in the classroom or learning environment.
- Directly communicated threats of imminent harm
- Self-injurious behavior during class
- Physical assault that is threatened or in progress during class
- Throwing objects or slamming doors during class

For Dangerous Behavior, faculty should contact University Police. After notification of University Police, the faculty member should notify the department chair and academic dean and then follow the procedures outlined above for disruptive behavior.

## Progressive Approach to Handling Disruptive Behaviors

A progressive approach to handling disruptive behavior gives the student the opportunity to modify their behavior. It also gives the student time to seek out appropriate assistance from the Center for Academic Success and Achievement, the Office of the Dean of Students, or the Counseling Center if applicable.

For Disruptive Behavior, course instructors should pursue the following steps:
For the first reported incident:

1. The faculty member reports the incident of disruptive behavior in their class to the department chair, using the Disruptive Classroom Behavior Reporting Form.
2. This form will be filed in the Office of Academic Affairs.
3. The faculty member, department chair, and academic dean should communicate regarding the incident within 24 hours and prior to the next class period whenever possible.
4. Next steps are identified through collaboration among the faculty member, department chair, and academic dean prior to the next class period whenever possible. Depending on the severity of disruption, intervention options, which may be used separately or in combination, include the following:
a) The department chair follows up with the student and discusses resources available for support. The faculty member has the option to attend this meeting.
b) If advised by the chair or dean, depending on the severity of the incident, the faculty member submits a report to the Student Assistance Team (SAT).
c) The faculty member contacts the Office of Community Standards to file a complaint or to consult and receive assistance.
d) The faculty member contacts the Title IX Coordinator for students if the case involves allegations of discrimination, discriminatory harassment, sexual harassment, and/or gender-based harassment.
e) The academic dean notifies the Provost as needed.

For any Subsequent Event in the Same Class:

1. The faculty member reports a second or subsequent occurrence with this student on the Disruptive Behavior Reporting Form. The form should be forwarded to the chair and the academic dean within 24 hours of the incident. This form will be filed in the Office of Academic Affairs.
2. The student may be asked not to return to class until the involved parties have a chance to consult.
3. Prior to the next class meeting, the academic dean will contact the faculty member and the department chair to obtain additional information and consult. The academic dean will communicate with all parties involved through the duration of the removal from class (if the incident is not resolved prior to the next class meeting). A determination should be made within three business days.
4. After the consultation, the academic dean will consult with the Dean of Students and other parties as appropriate and may pursue formal academic disciplinary action.
5. If formal academic disciplinary action is warranted, the academic dean will contact the student in order to address any allegations.
6. The academic dean will follow up with the faculty member and department chair to communicate next steps or final outcomes.
7. Once a decision has been made, the academic dean will inform appropriate parties of outcome if necessary and appropriate (e.g. Office of Financial Aid, Office of Student Accounts, Dean of Students, Registrar, University Police).
8. The student may appeal any formal academic disciplinary action to the Dean of Students and Provost/Vice-President for Academic Affairs.

## Appeal of Formal Academic Disciplinary Action

The student has five business days to submit a written appeal of the formal academic disciplinary action to the review board, which consists of the Dean of Students and the Provost/Vice-President for Academic Affairs. The grounds for the appeal are limited to

- A claim of a procedural error within the investigation and resolution process that would substantially change the outcome;
or
- A consideration of new evidence that was not known at the time of the investigation that would substantially change the outcome.

All appeal decisions are final.

## COURSE ATTENDANCE

Classroom instruction is a principle component of the educational process. Students and faculty have a mutual responsibility for contributing to the academic environment of the classroom. Consistent class attendance and participation in classroom activities are essential. Students are expected to attend all classes. Students should consult the course outline or syllabus to determine the relationships between attendance, including tardiness, and the goals, objectives, requirements, and grading of each course.
Per federal regulations, students are expected to engage in two (2) hours of study outside of class for each semester hour in class. At FSU, one (1) course credit equals four (4) semester hours and students would be expected to spend eight (8) hours of study outside of the classroom.

## FIELD TRIP POLICY

Field trips must be approved in writing by the chair of the department to which the faculty member planning the trip belongs before any definite arrangements are made.
No special notice is required if the trip is to be completed during the normal class time. If a trip of longer duration than the normal class time is to be taken, it is the responsibility of the faculty member to publicly post notice of any such trip at least two weeks prior to its occurrence.
Participation on the part of the students will be on a voluntary basis when a field trip conflicts with regularly scheduled classes. Before any such field trip, the instructor must advise students that they will not be penalized for non-participation. If more than half of the students in another class are absent because of such a field trip, the instructor in that course may cancel the class.

## DIRECTORY INFORMATION

The Family Educational Rights and Privacy Act (FERPA) designates certain information related to students as "Directory Information". This gives the University the right to disclose such information to anyone inquiring without having to ask students for permission, unless the students specifically request in writing that all such information not be made public without their written consent. The categories of "Directory Information" at Framingham State University are as follows:

- Student's legal name
- Mailing Address
- Major field of study
- Dates of attendance and Enrollment status for a particular semester (FT, HT, LT)
- Class standing (if an Undergraduate - Freshman, Sophomore, etc.)
- Degrees and awards received including Dean's/President's lists and graduation honors
- Participation in officially recognized sports
- Weight and Height of members of athletic teams
- Most recent previous educational institution attended by the student

A request form to prevent disclosure of directory information is available from the Office of the University Registrar.

## PRIVACY RIGHTS OF STUDENTS

Students are hereby notified that Framingham State University complies with the provisions of federal laws governing the privacy and disclosure of student information. The University has adopted a policy for assuring this privacy. This policy defines types and locations of educational records, stipulates students' and parents' rights, describes procedures for parents and students to review and inspect educational records, and provides a procedure to file complaints concerning alleged failures by the institution to comply with the federal law. Copies of the institutional policy may be secured from the Office of the University Registrar web pages.

## DECLARE OR CHANGE MAJOR, MAJOR CONCENTRATION, OR MINOR

Undergraduate students who wish to declare or change a major, major concentration, or minor may do so through the Office of the University Registrar.

## COURSE REGISTRATION

The course registration period for an upcoming fall or spring term begins approximately midsemester of the current term. Students receive information for advising and registration from the Academic Advising Center and the Office of the University Registrar. Students are required to meet with their Academic Advisors to plan their upcoming course selections. After consulting with their advisors, students then register for the upcoming fall or spring term based on priority of registration and registration grouping.

Priority of Registration: Students in Commonwealth Honors Program are permitted to register first in their registration grouping followed by eligible varsity student-athletes, when registering for courses that coincide with their competitive seasons.

## REGISTRATION GROUPING FOR FALL OR SPRING SEMESTER:

To ensure reasonable opportunity for course planning at registration, the registration groupings are based on the following:

Group 1 - Expected Completion of 22 or more course-credits.
Group 2 - Expected Completion of 14-21 course-credits.
Group 3 - Expected Completion of 6-13 course-credits.
Group 4 - Expected Completion of fewer than 6 course-credits.
(Expected Completion refers to the combination of previously completed courses, if any, including transfer coursework, along with currently enrolled courses).

## ADDING OR DROPPING COURSES

By logging into the portal, myFramingham:

- Students may add or drop a semester course or course sections without financial penalty in the Day Division if they do so before the end of the sixth academic day (see semester calendar).
- Students may add or drop a quarter course or course sections without financial penalty in the Day Division if they do so before the end of the third academic day (see semester calendar).
Please note the if the course if offered through the Department of Graduate and Continuing Education (GCE), financial penalties may occur as the course refunding rules being applied as different than those in the Day Division (see GCE Refund Polices web page).

If the course has prerequisites that are required, a student must obtain written approval from the course instructor for a prerequisite override to be sent an as email to the Office of the University Registrar before the end of the Course Add/Drop period.

Note: Non-attendance does not constitute being "dropped" from a course. Also, attending a course without having been officially "added" to the course does not constitute enrollment in the course.

## WITHDRAWING FROM COURSES

## Voluntary Course Withdrawal

Students may withdraw from a course or courses during the period between the end of the Course Add/Drop period through the end of the thirteenth week of the fall and spring semesters (or for a quarter course, no later than the end of the fifth full week of the quarter) regardless of their financial status at the University. Students who withdraw during this period will incur no academic penalty as far as the grade point average is concerned but will have a notation of "W" on their permanent records. Students will be notified of the specific deadlines via email during each semester. Students wishing to withdraw from a course must log onto myFramingham and select the course to drop before the end of the Course Withdrawal period (see semester calendar).

No student may withdraw from a course during the fall and spring semesters after the course withdrawal period ends unless there are extraordinary circumstances (such as documented hospitalization or sickness or the inability to withdraw by the deadline due to technical issues). In such cases, a "W" grade may be authorized with the approval of the Academic Dean of the College in which the course is housed or a designee in consultation with the course instructor and the appropriate academic dean.

Students do not receive grade points for Withdraw (W) grades, but a notation appears on the transcript.

Students who withdraw from all of their courses will be withdrawn from the University effective on the date when the latest voluntary course withdrawal took place. Students who withdraw from the University will need to apply for readmission when they are ready to return.

## Administrative Course Withdrawal

Faculty may request that a student be administratively withdrawn from courses for non-attendance or non-participation in course activities. For this purpose, non-attendance is considered 21 consecutive calendar days of failure to engage in the course. At this point, a faculty member may initiate an administrative withdrawal.

Students who are administratively withdrawn from all of their courses will be withdrawn from the University. Students who are withdrawn from the University will need to apply for readmission when they are ready to return.

No refund will be given for nonrefundable deposits, or laboratory or course fees. Tuition and fee refunds will be assessed according to the University's various refund policies. Withdrawal from courses can impact financial aid and a students' eligibility for housing, participation in athletics, and Veterans benefits. It is the student's responsibility to contact the financial aid, housing, athletics department, and Veterans services office in the event of a course withdrawal (if applicable).

An administrative withdrawal will result in a grade of "WN" (withdrawal non-attendance) if classes are withdrawn in the time between the end of the drop period and prior to the end of the 13 th week of the semester for the fall and spring semesters or no later than the end of the fifth week of a quarter semester course. Students do not receive grade points for Withdraw (WN) grades, but a notation appears on the transcript

## SEMESTER COURSE LOAD

The minimum academic load for each semester for full-time undergraduate students is three (3) course credits, which is equivalent to 12 semester hours. The minimum program required for receipt of maximum educational benefit payment under the Veterans Readjustment Benefits Act of 1966 and for receipt of Social Security benefits as a dependent is three (3) course credits per semester.

The average academic load for most full-time undergraduate students is four (4) course credits, which is equivalent to 16 semester hours. It is recommended for timely degree completion for fulltime students to enroll in a minimum of four (4) course credits for each fall and spring semester to graduate with a bachelor's degree in four (4) years.
Students contemplating a reduced course load should be aware that such a reduction may alter their financial aid and/or veteran's benefits status as well as extend the time frame needed to complete degree requirements. In planning course loads, students should consider the maximum number of credits allowed each semester, the number of credits required for graduation, the sequence of courses, and the number of semesters they plan to attend the University.
Courses may not be "split," that is, all classes in a given course must be taken by the student within the same section. A student may not register for two (2) courses that meet at the same time or overlap start/end times.
In the event that students desire to take a course offered through the Department of Continuing Education (CE) because one of an equivalent type is not available in the Day Division, they may request to change their Division Enrollment Status to Evening School (CE) in order to take the CE course. If this is done, students must pay the full cost of the CE course in addition to Day Division program charges.

## REQUEST 5 ${ }^{\text {th }}$ COURSE POLICY:

The maximum academic load for each semester for full-time students is five (5) course credits, which includes courses taken in Continuing Education as well as off-campus.

Requirements for taking a fifth course-credit are:
a. an overall GPA greater than or equal to 2.70;
b. successful completion of at least 16 course-credits;
c. at least one semester of four (4) course-credits completed for students who transferred 16 or more course credits;
d. completion of three of the four (4) previous semesters with four (4) course-credits.

Students must complete the $5^{\text {th }}$ Course Request form and submit it to the Office of the University Registrar. Students not meeting the policy requirements and therefore denied permission, may appeal to their major Department Chair prior to the end of the Course Add/Drop period. Department chairs may grant exceptions to the above stipulations in special circumstances.

## DIRECTED STUDY

Students who wish to take a regular university course in a term when it is not offered may seek to do so through a Directed Study option. However, students must understand that, because the appropriate FSU faculty must be available and approvals must be granted, the option of Directed Study for a particular course is not always available. In Directed Study, the FSU faculty member must agree to provide the student with close supervision, in achieving the same course objectives that would have been accomplished had the student taken the course on a regular class basis. Permission for Directed Study must be obtained from the subject/course faculty supervisor and the course department chair. Forms for enrolling in Directed Study are available at the Office of the University Registrar. The completed forms must be submitted to the Office of the University Registrar prior to the end of the Course Add/Drop at the start of the semester. Directed Study courses will appear on the student's course history with the actual course prefix, number, and title as found in the Catalog.

## INDEPENDENT STUDY

Independent Study, which is faculty-supervised research or readings into areas of study outside the current curriculum, offers students the opportunity to investigate a research topic or readings independently, under the close supervision of a FSU faculty member. Independent Study will only be approved for research into areas of study that do not duplicate the University's current curriculum of courses. The student will be responsible for meeting the departmental requirements of the Independent Study as outlined in the catalog description and approved by the FSU faculty supervisor and the course department chair. The FSU faculty sponsor will assume responsibility for coordinating the Independent Study, evaluating its results, and determining an appropriate grade. Forms for enrolling in Independent Study are available at the Office of the University Registrar. The completed forms must be submitted to the Office of the University Registrar prior to the end of the Course Add/Drop at the start of the semester. Independent Study topics will be so designated on the student's transcript.

## INTERNSHIP AND PRACTICUM

A number of departments within the University offer students the opportunity to enroll in an internship or practicum for academic credit. Such experiences provide students with the opportunity to undertake a supervised practical experience. An internship may be completed during any academic term. Students interested in an internship for academic credit should consult with their academic advisor and chair of department offering internship, before the semester in which they propose to begin an internship. Students who want to enroll in an internship must meet departmental internship requirements, as specified in the course description, and submit a written application to the faculty member who will supervise their internship and their department chair for approval. This application must include the following information:

- the academic term during which the internship will be undertaken;
- the name of the agency, company, or organization where the internship will be served;
- the internship supervisor, including contact information;
- the work responsibilities of the student intern;
- academic value of the internship experience, including the goal(s) of the internship experience, the total number of hours of the internship, which must meet a minimum of 120 hours for each course-credit, unless a higher minimum is specified in the course description;
- a brief description of how the intern will be evaluated.

This information must be submitted on the departmental internship application form. Registration for an internship must be completed by the end of the Course Add/Drop period for the semester in which the internship will be served. As soon as the University Registrar has received the completed and approved internship application, signed by the faculty supervisor and department chair, the application will be processed and the student enrolled into the course.

## COURSE CREDIT/NO CREDIT OPTION POLICY

The primary purpose of the Credit/No Credit Option is to afford students an opportunity to explore course work in areas outside of their regular degree requirements without the direct application of the normal letter grade scale to their grade point average (GPA). A course selected under the provisions of the Credit/No Credit Option, as outlined below, is assigned a grade of Credit (Cr) if the student earns a final grade of D- or above. The student is assigned a No Credit (NC) if the student earns a final grade below D-

Matriculated undergraduate students are permitted to take up to four (4) courses on a Credit/No Credit basis during their entire degree program, subject to the following conditions:

1. Only one (1) course may be taken on a Credit/No Credit basis during enrollment in any fall, wintersession, spring, or summer term (in addition to those courses which are graded Credit/No Credit for all students in that course);
2. Excluded as Credit/No Credit Option courses are those in the following categories:
a. Courses in the student's academic major/concentration, including major-related, or in a minor. Once all major/concentration or minor requirements have been met, students may elect to take a course within the major department on a Credit/No Credit basis;
b. Prerequisite courses in which a minimum grade is required for advancing into a requisite course that is required for major/concentration or minor requirements;
3. Timeframe for requesting the Credit/No Credit Option:
a. A student must declare whether a course is Credit/No Credit by the last day of the course withdrawal period of the term. The student requesting to take a course on a Credit/No Credit basis will be notified by the Office of the University Registrar within one (1) business day regarding eligibility;
b. A student who initially selects the Credit/No Credit Option may switch to the graded option on or before the final day for course withdrawal. The request to do so must be submitted in writing to the Office of the University Registrar;
4. If the student changes or declares a major or minor that requires a course or courses previously taken on a Credit/No Credit basis, the student's records will be amended by the Office of the University Registrar to convert the Credit/No Credit to the actual grade submitted by the course instructor(s);
5. The instructor of the course is not informed that the student has filed a Credit/No Credit Option for the course. When the instructor submits a letter grade for the student, the Office of the University Registrar will convert it to a Credit (CR) or No Credit (NC) grade.
6. A Credit grade grants the student course credit but does not count in computing the student's GPA. A No Credit grade has no impact on the student's GPA.

## TRANSFER COURSES (AFTER MATRICULATION)

## Off-Campus Course Approvals

- Transfer credit is awarded for college-level courses only. Developmental coursework does not transfer but may be used for student placement purposes.
- Transfer credit is given only for courses in which the student received a grade of C- (1.70/4.00 scale) or higher.
- A Pass/Fail or Credit/No Credit grade is not transferable unless otherwise indicated on the transcript key that the value of Pass or Credit is equal to a C- (1.70) or higher.
- Effective Fall 2022, coursework taken as an equivalent course from another institution may be used to replace a course previously taken at FSU. The transfer credit will replace the course taken at FSU as a Course Repeat (see Course Repeat Policy for details).
- Transfer credits and grades will not affect the Institutional GPA, but will be used in determining "attempted" credits when determining academic standing.
- Off-Campus Course Approval Request forms are available through the Office of the University Registrar or on the web at www.framingham.edu/registrar. Applications for approval of a course must be accompanied by the appropriate catalog description from that institution if the course is not found in R.A.M.S. (Records Articulation Management System). The student must submit the completed form to the Office of the University Registrar prior to taking the course.
- The Off-Campus Course Approval Request(s) will then be reviewed for course transferability as determined by the University Registrar. All approved courses transferred into Framingham State University after matriculation will be posted to the student's academic record.
- All approved courses accepted in transfer will be awarded Framingham State University coursecredit in an amount equal equivalent to FSU's course-credit. For example, transfer courses that bear 3 credits from the sending institution are the equivalent of 0.75 course-credits. Transfer courses that bear 4 credits from the sending institution are the equivalent of 1 course-credits. Transfer courses that bear 1 credit from the sending institution are the equivalent of 0.25 coursecredits.
- Please note: Matriculated undergraduate students may be allowed to transfer up to (3) graduatelevel courses taken at Framingham State University or other institutions toward undergraduate degree completion requirements.
- Transcripts of these approved courses must be submitted to the Office of the University Registrar within six (6) weeks after the completion of the course. It is the student's responsibility to have official transcripts sent directly by the institution to the Office of the University Registrar.


## R.A.M.S. (Records Articulation Management System) for Transfer Course Equivalences at Framingham State University:

- The University Registrar maintains a list of articulated transfer courses in the Records Articulation Management System (RAMS). Courses displayed in RAMS are those that have previously been established as equivalent courses from other institutions.
- Students planning to take courses at other institutions should review this list to see if the courses that they plan to take are equivalent to FSU courses. Students can view general information regarding transfer course equivalencies for various institutions for planning purposes only. The information presented here is not a comprehensive list of all institutions and their transfer course equivalencies.
- Determination of transfer course equivalencies for courses not listed in R.A.M.S. rests with the Academic Department Chairs at FSU. The Academic Department chair of the department in which the course is offered reviews the transfer course equivalencies for a particular course.
- Students must use Off-Campus Course Approval Request forms to obtain approval for transfer courses prior to enrolling in courses at other institutions.
- Transferability and allocation of courses to General Education and/or free electives will be determined by the Office of University Registrar, in consultation with academic deans, in accordance with established transfer policies and course articulations.
- Course to course equivalencies and/or substitutions of transfer credit towards major/minor course requirements must be approved and determined by the department chair in which the major or minor is housed. After obtaining the appropriate signatures for approval of the course, the student must return the completed form to the Office of the University Registrar.


## Study Abroad Course Approvals

- Students approved to enroll in a Study Abroad semester will need to complete Off-Campus Course Requests for courses prior to leaving for the study abroad semester. Please refer to the section regarding Off-Campus Course Requests forms. Note: often times students will enroll in a course or courses that they did not receive prior approval for. For these courses, the student should complete the request form at the start of the semester, else the courses completed may not be eligible to satisfy any major or minor requirements.
- In order to confirm course enrollment, an enrollment verification form listing the courses for which the student is enrolled will need to be completed by the host institution and sent directly from the host institution to the Office of the University Registrar at FSU. Any coursework listed on the enrollment verification which was not submitted for prior approval will be applied towards open/free elective, or in some cases towards general education requirements.
- Official transcripts are required to be submitted to the Office of the University Registrar in order for the transfer credit to be finalized. These official transcripts are typically generated by the host institution without the student needing to request this to be done.


## MID-TERM WARNINGS

Major warnings (grade of "F") and minor warnings (grade of "D") may be issued to the student at the midpoint of any undergraduate course. These warning grades, if submitted by the course instructor, may be viewed by the student via my.framingham.edu. Warnings may also be issued by the course instructor directly to the student at any time if the student's work is approaching a less than satisfactory level.

## EXAMINATIONS

1. All examinations are to be given within the structure of the University policy regarding academic honesty.
2. Examinations, other than the final examinations, may be scheduled at the discretion of the instructor. It is the responsibility of the student to follow whatever procedures are established and presented in writing to the students by the instructor at the start of each semester for such tests.
3. All University courses should have a culminating experience that consists of either a final examination or final course project. Final examinations must take place during the regularly scheduled examination periods. The length of time for the final examination is determined by the course instructor, but it must begin at the regularly scheduled examination time and may not exceed the allotted three (3) hour final exam time block. Final course projects should be due no later than the day and time of the scheduled final examination period for that class.
4. Students who are absent from a final examination should contact the instructor to discuss the reason for the absence. In accordance with the incomplete policy, a copy of the final examination may be sent to Center for Academic Support and Achievement (CASA). The exam will be administered on posted dates.
5. Examinations and other graded course materials should be made available to students in a timely fashion, in accordance with FERPA (Family Educational Rights and Privacy Act of 1974). If retained by faculty, they should be kept until the end of the next academic semester and should be made available for students' review upon request.

## GRADING SYSTEM

Framingham State University uses the following marking system:

| Grade | Grade Points | Grade | Grade Points |
| :---: | :---: | :---: | :---: |
| A | 4.0 | C | 2.0 |
| A- | 3.7 | $\mathrm{C}-$ | 1.7 |
| B+ | 3.3 | $\mathrm{D}+$ | 1.3 |
| B | 3.0 | D | 1.0 |
| B- | 2.7 | $\mathrm{D}-$ | 0.7 |
| C+ | 2.3 | F | 0.0 |

$\mathrm{AU}=$ (Audit-no credit) A student may audit a course with the written consent of the instructor. Such course enrollment will be officially reported on the student's transcript pending approval by the instructor, but the student will not receive any credit. An auditor may not participate actively in course work. The approval for this status must be obtained from the Office of the University Registrar and returned completed by the end of the fifth academic day of the semester
$\mathrm{CR} / \mathrm{NC}=($ Credit/No Credit) A Credit grade grants the student course credit but does not count in computing the student's GPA. A No Credit grade has no impact on the student's GPA.
$\mathrm{S} / \mathrm{U}=$ (Satisfactory/Unsatisfactory) This grade is used only for student teaching experience.
$\mathrm{W}=$ Withdrawal from a Course. Indicates withdrawal from a semester course in the third through the thirteenth week of the semester, or for a quarter course, no later than the end of the fourth full week of the quarter.
$\mathrm{WN}=$ Withdrawal for Non-Attendance. Indicates an administrative withdrawal from a course or the University if it has been determined the student is not in attending classes between the end of the drop period and prior to the end of the 13 th week of the semester for the fall and spring semesters or no later than the end of the fifth week of a quarter semester course. Students do not receive grade points for Withdraw (WN) grades, but a notation appears on the transcript.

WX $=$ Withdrawal from the University after the Course Add/Drop period but before the end of the thirteenth week of the semester. The student has officially withdrawn from the University and no longer attends classes.
$\mathrm{MG}=$ Missing Grade. Final grade not yet submitted by the faculty.
$\mathrm{NG}=$ Non-Graded course.
$\mathrm{IR} / \mathrm{IC}=$ (Incomplete Requested/Incomplete Contract Submitted) This is a temporary grade designation that has no impact on the student's grade point average.

## INCOMPLETE GRADE POLICY

The Incomplete (IC) grade may be given to a student when the instructor is satisfied that circumstances beyond the student's control prevented the student from completing the required work for the course. The grade of IC may only be awarded if it is mathematically possible for the student to pass the course with the completion of the remaining work. An incomplete cannot be considered until after the course withdrawal deadline has passed.
The student must submit a Request for Incomplete form to the instructor no later than the last day of the semester. If the instructor agrees with the request, they shall complete and sign the form. If extenuating circumstances prevent the student from completing the request form, the faculty member may initiate the incomplete request. An incomplete grade may not be considered passing for purposes of determining federal financial aid eligibility, athletic eligibility, or other purposes.
Faculty are required to assign the final grade that would be issued at the end of the semester (i.e., the final grade that will be issued if the student does not complete the work indicated on the incomplete contract form). The student and the faculty member shall agree upon a deadline for the completion of course work. The agreed upon deadline shall be no later the end of spring break for fall and wintersession courses, September $1^{\text {st }}$ for spring courses and October $1^{\text {st }}$ for summer courses.

## ELIGIBILITY FOR ATHLETICS

Students participating in intercollegiate athletics must carry a full-time academic course load throughout the entire semester (minimum of three course-credits) and be in good academic standing. All athletes must pass six (6) course-credits ( 24 semester hours) during each year of attendance.
In addition, to be eligible for intercollegiate athletics, all student athletes must pass 24 semester hours (6 credit-bearing courses) within one calendar year of enrollment (September $1^{\text {st }}$ to September $1^{\text {st }}$, or January $1^{\text {st }}$ to January $1^{\text {st }}$ if enrolled spring semester). All students must take a minimum of 12 semester hours (3 credit-bearing courses) during their season(s) of competition to be eligible to compete in athletics.

## ELIGIBILITY FOR STUDENT LEADERSHIP

To hold any class or student organization office, students must be matriculated undergraduate students enrolled in a minimum of two course-credits per semester, and be in good academic standing.
Eligibility for student participation on the following university-wide governance committees is subject to the Massachusetts State College Association (MSCA) Faculty Collective Bargaining Agreement. The Student Government Association selects all student representatives to serve on governance committees as outlined in the Massachusetts State College Association (MSCA) faculty contract. These students must be matriculated and enrolled full-time.

All University Committee (AUC) - Three (3) student representatives
Standing Committees (student representatives must have junior or senior standing):
University Curriculum Committee (UCC) - Three (3) student representatives
Academic Policies Committee (APC) - Three (3) student representatives
Student Affairs Committee (SAC) - Nine (9) student representatives

## COURSE REPEAT POLICY - UNDERGRADUATE

Effective Fall 2022, the University has established the following policy for undergraduate students regarding the repeating of courses.

- You may repeat courses taken at the university, regardless of the original grade earned in these courses.
- If you choose to repeat a course, both grades for the course will be posted on your academic transcript but only the higher grade will be counted toward your grade point average (GPA). The repeated course will be noted on your transcript as an "excluded repeat".
- Only Framingham State University grades are used to calculate your GPA.
- If you retake a course at FSU that has already transferred in, the transfer course will be removed.
- You may take an equivalent course from another institution to replace a course previously taken at FSU. The FSU course grade will not be calculated in your overall GPA, and the transfer credit will replace the course taken at FSU.
- The course repeated must be equivalent to the first course taken. In the event that the course no longer exists at FSU, an exception may be considered.
- You may not repeat a course after graduation as your academic transcript is finalized upon degree conferral.


## Exceptions:

- Certain courses, such as Special Topics courses, among others, are designated as "repeatable for credit". A grade earned in such a course cannot be replaced by a grade from a later retake of the course. This means that each grade will count toward your GPA, and each time you complete such a course you will earn credits.
- RAMS First-Year Seminars are defined as "the same course," despite distinct course numbers and being offered by multiple departments. If you repeat a RAMS First-Year Seminar, you will receive credit for the course with the higher grade and, therefore, fulfill the General Education subdomain affiliated with that course.


## Please note:

- The highest grade for the repeated course is used for your GPA, but all grades appear on your academic transcript.
- Repeating a previously passed course may affect your financial aid. You should consult with the Office of Financial Aid if you are considering repeating a course that you have previously passed.
- If you return to FSU for a second bachelor's degree, you may not repeat any courses that were part of your first undergraduate degree.


## GRADE APPEAL POLICY

Students have the right to discuss and review their academic performance with their instructors. Faculty have the right to establish grading standards. Faculty also have the responsibility to define general grading criteria in a course syllabus, communicate those criteria to students, and evaluate students based on those criteria.

Students may appeal final course grades (herein, grade) based on evidence of error, arbitrariness, and/or discrimination. Appeals must be based on concerns related to process and not on differences in judgment or opinion related to academic performance. The burden of proof rests on the student to demonstrate that the grade satisfies the criteria for appeal.

## Error

- The instructor made a mistake in calculating the grade.


## Arbitrariness

An arbitrary grade is considered to be one that is:

- A substantial departure from reasonable academic practice, such as arbitrarily assigning grades or determining a priori that a specified percentage of the class will receive a specific grade. To fairly represent a student's true achievement, it is understood that failing grades on assessments should receive their true percentile value.
- A grade assigned to a student on the basis of criteria that are a substantial, unreasonable, and unannounced departure from the instructor's previously articulated standards.
- A grade resulting from an instructor adding items not listed on the syllabus, except for extra credit.
- Assigned to a student by resorting to unreasonable standards different from those which were applied to other students in that section of the course.
- Motivated by judgment outside of academic performance (e.g. ill will toward the student).


## Discrimination

The University's Equal Opportunity Plan ("EO Plan") prohibits discrimination and harassment on the basis of membership in a protected class. A complaint may proceed under the Investigation and Resolution Procedures, the Title IX Informal Resolution Process, or the Title IX Formal Resolution Process outlined in the EO Plan when a student alleges that a grade was improper because of discrimination, discriminatory harassment, sexual or gender harassment, domestic or dating violence, stalking or retaliation prohibited under the EO Plan. For example, a professor making a quid pro quo arrangement or directing hate/bias speech toward students or protected classes would be some of the types of behaviors that would be indicative of a discrimination-based grade appeal.

## Grade Appeal Process

If a student is filing based on discrimination, prior to initiating the grade appeal, this complaint may be filed directly with the Equal Opportunity Officer "EO Officer" or University Title IX Coordinator. A student is never required to file a complaint under the EO Plan in order to initiate the Grade Appeal Process. See "EO Appeal Process" below.

## For appeals based on error or arbitrariness:

## Step One: Informal Appeal to the Instructor

If a student feels that they received a grade that is eligible for appeal, they should first contact the course instructor within four weeks of the official end of the semester or two weeks after the grades are posted, whichever is later. The student and instructor will have an informal discussion regarding the grade. If the issue is not resolved, the student moves on to Step Two.
If the course instructor is no longer teaching at the University or is otherwise unavailable, the student's initial grade complaint should go to the department chair.

## Step Two: Formal Appeal to the Instructor

Within two weeks of the informal appeal decision, the student submits a formal appeal to the course instructor along with supporting documentation outlining why the grade is being appealed. The student must provide evidence that the grade satisfies the criteria for appeal. The course instructor will inform the student of the results of a further consideration of the grade in writing within two weeks of receipt of the formal complaint.

## Step Three: Appeal to the Academic Department Chair

If, after hearing back from the instructor, the student still believes that the grade is eligible for appeal, the student should meet with the chair of the department in which the course was offered within two weeks after receipt of the appeal decision from the course instructor. The student will share the written appeal and documentation with the chair. The chair may meet also with the course instructor. The chair may not change the grade, but the course instructor may choose to do so after their discussion with the chair. The course instructor will notify the student and chair in writing within two weeks of their decision, after meeting with the chair.

## Step Four: Appeal to the Academic Dean

If, after being informed of the course instructor's decision, the student still believes that the grade is eligible for appeal, the student may take up the matter with the academic dean of the college in which the course was offered (home department) within two weeks of receipt of the course instructor's decision. The student will share the written appeal and documentation with the academic dean. After reviewing the student's appeal and the course instructor's response(s), the academic dean will discuss the matter with the student, the course instructor and/or the department chair. The academic dean may also invite the course instructor to submit a statement. The academic dean may also decide to hold a meeting at which both the student and course instructor may respond to the other's written statements and to any questions that the academic dean wishes to pose to them. If the academic dean determines that there is no merit to the appeal, the dean shall inform the student that the grade will stand. This ends the appeal process.

## Step Five: Appeal to the Academic Policies Committee (APC)

If the academic dean determines that there may be merit to the appeal, they will refer the case to the Academic Policies Committee (APC). The Chair of APC will appoint a subcommittee consisting of three faculty members. No more than one member of this subcommittee shall be from the same department as the course instructor of the course in question. This hearing body will review the substance of the case and make recommendations regarding whether a grade change would be appropriate. The hearing body will have the authority, after a thorough review of all relevant assignments and related materials, to uphold the grade assigned by the instructor, to assign an appropriate grade, or to allow the student to accept a pass in the course rather than a letter grade. The decision of the subcommittee is final.

Note: In all meetings with the course instructor, department chair, or academic dean that are part of this appeals process, the student may bring a support person of their choice except for legal counsel.

## For appeals based on discrimination:

If a student is filing based on discrimination, prior to initiating the grade appeal, this complaint may be filed directly with the Equal Opportunity Officer "EO Officer" or University Title IX Coordinator. A student is never required to file a complaint under the EO Plan in order to initiate the Grade Appeal Process. See "EO Appeal Process" below.

Note: If the department chair, academic dean, and/or the APC subcommittee is presented with allegations or otherwise determines that the grade appeal involves allegations of discrimination, discriminatory harassment, sexual or gender-based harassment, domestic or dating violence, stalking or retaliation as outlined in the University's Equal Opportunity Plan ("EO Plan"), the deadline to file the formal appeal and other subsequent deadlines will be waived. These cases will be referred to the EO Officer or University Title IX Coordinator by the chair, dean, or the APC subcommittee before proceeding further. The remedy for policy violations in cases pursued under the procedures in the EO Plan may be determined and/or implemented in conjunction with Academic Affairs. If no violation of the EO Plan is found, or the student declines to file a complaint under the EO Plan, the EO Officer may refer the matter back to the grade appeal process.

EO Appeal Process: If the student elects to use the processes available under the EO Plan, the EO Officer or University Title IX Coordinator will implement the procedures as outlined in the EO Plan. The academic affairs Grade Appeal Process will be suspended pending review and determination under the EO Plan. If no violation of the EO plan is found, the EO Officer may refer the matter back to the grade appeal process. In the event of a finding of a violation of the EO Plan, the EO Officer will remand the matter to the Provost (or their designee) who will designate an appropriate person to decide the outcome of the grade appeal.

## UNIVERSITY POLICY REGARDING ACADEMIC HONESTY

Integrity is essential to academic life. Consequently, students who enroll at Framingham State University agree to maintain high standards of academic honesty and scholarly practice. They shall be responsible for familiarizing themselves with the published university policies and procedures regarding academic honesty. Faculty members are required to reference the university policy on academic honesty in their syllabi, and they shall, at their discretion, include in their course syllabi additional statements on definitions of academic honesty and academic honesty policies specific to their courses if applicable.

Infractions of the Policy on Academic Honesty include, but are not limited to:

1. Plagiarism: claiming as one's own work the published or unpublished literal or paraphrased work of another;
2. Cheating on exams, tests, quizzes, assignments, and papers, including the distribution or acceptance of these materials and other sources of information without the permission of the instructor(s);
3. Unauthorized collaboration with other individuals in the preparation of course assignments;
4. Submitting without authorization the same assignment for credit in more than one course;
5. Use of dishonest procedures in computer, laboratory, studio, or field work;
6. Misuse of the University's technical and educational facilities either maliciously or for personal gain;
7. Falsification of forms used to document the academic record and to conduct the academic business of the University.
8. The enlistment of another individual or entity to complete one's course work.

## Procedures for Handling Cases of Alleged Infractions of Academic Honesty

When a course instructor suspects a student of academic dishonesty, they notify the student in writing of the alleged infraction as soon as possible after the discovery of the infraction. After an infraction, the course instructor administers appropriate penalties that range from resubmission of the work in question to failing the course, as determined by the course instructor. The student will have five business days to respond to the allegation in writing through email or the appropriate form. If the student does not dispute the allegation or the student does not respond to the charges within five business days, the course instructor reports the infraction to academichonesty@framingham.edu , using the appropriate form, serving as notice to the Office of Academic Affairs, Academic Deans, and the Academic Policies Committee (APC) Chair. This notification must take place within ten business days of the discovery of the infraction and should include any corroborating evidence.

If a student disputes the allegation of academic dishonesty, the alleged infraction will be heard by a subcommittee of APC in executive session. This subcommittee will be comprised of the APC Chair, up to three APC faculty members and up to two students recommended under the auspices of the Student Government Association. All members must be disinterested parties with allowances being made for members to recuse themselves if a conflict of interest is identified by any of the parties. The resulting subcommittee will always be composed of an odd number of voting members. The APC Chair's role is to facilitate the meeting, and is not considered a voting member. A decision will be rendered based on a majority vote. The subcommittee will review the case within ten business days of receipt. The student, course instructor, and any relevant University personnel will be invited to the subcommittee hearing by the APC Chair, although attendance of those invited is not mandatory. The APC Chair will distribute any documentation and evidence received regarding the alleged infraction to the student and subcommittee prior to the hearing. The subcommittee will base their decision solely on any evidence or testimony presented during the hearing.

The student may have a support person accompany them to any scheduled APC Academic Honesty sub-committee meeting(s). A support person may not address any person involved in the hearing except for the student they are supporting; a support person who does not comply with these requirements may be dismissed by the presiding administrator

The standard of review used to evaluate the alleged academic infraction is preponderance of evidence, which is "more likely than not". Within five business days after the meeting, the APC Chair will notify the student, the faculty member, and the Academic Dean of the subcommittee's decision, which is final.

- If the student's appeal is successful, the faculty member will update the grade in question within ten business days;
Else
- If the student's appeal is unsuccessful, the APC Chair reports the infraction to the Academic Dean and the Office of Academic Affairs for record-keeping purposes in writing within five business days.
All records of academic honesty policy violations will be maintained by the Office of Academic Affairs. Faculty are expected to report all incidents of academic honesty infractions.


## In the case of multiple infractions.

Upon notification to an Academic Dean of a violation, the Academic Dean will determine if the student has previous infractions

After a student's second infraction at the University, the Academic Dean will notify the student that they must meet with the Academic Dean.

After a student's third infraction at the University, the student shall be notified of permanent dismissal from the University by the Office of Academic Affairs. This penalty of dismissal can be appealed. Such an appeal must be made in writing to the University Provost/Vice President for Academic Affairs within five (5) business days of notification of the penalty.

In the case that APC is not in session - June $1^{\text {st }}$ thru August $31^{\text {st }}$ - at the time of the alleged infraction, the Academic Dean will report the alleged infraction to the Provost. The Provost will appoint a subcommittee consisting of an odd number of faculty, administration, and students, as appropriate. The Provost, or their designee, will be the non-voting facilitator of the hearing. The hearing and timeline will otherwise proceed as specified above.

## SEMESTER HONORS

## Dean's List

A matriculated undergraduate student earns a place on this honor roll (published after the end of every fall and spring semester) for each fall and spring semester in which the student earns a GPA of 3.30 to 3.74

## President's List

A matriculated undergraduate student earns a place on this honor roll (published after the end of every fall and spring semester) for each fall and spring semester in which the student earns a GPA of 3.75 to 4.00 .

## Additional Eligibility Considerations

A student obtaining either an "IC" grade or an extension for an "N" grade is not initially eligible for the Dean's/President's List but may petition in writing to the Office of the University Registrar to have their eligibility for the Dean's/President's List reviewed once the final grade has been submitted. Petitions must occur by the end of the semester that the grade was submitted.

## COURSE RESIDENCY DEGREE REQUIREMENTS

Degree: To complete the University residence requirement, a minimum of eight (8) course-credits ( 32 semester hours) must be taken at the University.
Major: To complete a major requirement, a minimum of five (5) course-credits (20 semester hours) in the major department must be taken at the University. Major residency requirements may be partially fulfilled by courses taken through FSU Study Abroad program. Such cases require approval by the appropriate department chair.
Minor: To complete a minor requirement, a minimum of three (3) course-credits (12 semester hours) in the minor department must be taken at the University. Minor residency requirements may be partially fulfilled by courses taken through FSU Study Abroad program. Such cases require approval by the appropriate department chair.

## DEGREE COMPLETION REQUIREMENTS

Completion of a minimum of 32 course-credits to include general education and major (and minor, if any) requirements in accordance with the Course Residency Policy as well as earn an overall minimum grade point average (GPA) of 2.00 .
Effective Fall 2007, completion of a Baccalaureate Degree at Framingham State University requires that all students achieve a minimum 2.00 grade point average in their major requirements, including major-related courses taken outside of the home department in fulfillment of major requirements as well as satisfy the University's course residency requirements.
Effective Fall 2018, completion of a minor requires that all students achieve a minimum 2.00 grade point average in their minor requirements as well as satisfy the University's course residency requirements.

## DEGREE COMPLETION/CONFERRAL

## Notice of Degree Candidacy Application

The University confers degrees four times per year, in May, August $31^{\text {st }}$, December $31^{\text {st }}$, and January $31^{\text {st }}$. Diplomas are issued via mail to students approximately six to eight weeks following the degree conferral date.

There is only one University Commencement ceremony held annually in May.

Students are required submit the Notice of Degree Candidacy Applications to the Office of the University Registrar by the following dates:

| December $1^{\text {st }}$ | May degree completion/conferral* |
| :--- | :--- |
| April $1^{\text {st }}$ | August degree completion/conferral* |
| May $1^{\text {st }}$ | December degree completion/conferral* |
| September $1^{\text {st }}$ | January degree completion/conferral* |

Students will be assessed a $\$ 100.00$ graduation fee at time of application. This fee will appear on the student's account and will need to be settled before diploma is mailed.
*Conferral of a degree occurs only when the University Registrar finalizes the student's academic record and confirms that all degree requirements have been met.

## Commencement Ceremony Participation

Participation in the annual Commencement ceremony does not constitute conferral of the degree. Similarly, inclusion of a student's name on such publications as the Commencement program does not confirm eligibility for the degree.

Beginning with the Spring 2011 Commencement Ceremony, all students must complete all degree requirements in order to participate in the Spring Commencement ceremony.
Appeals of this requirement with regards to participation in the annual Spring Commencement ceremony may be made only on one of the following bases:
A. The student has no more than two (2) courses remaining to complete degree requirements, has a minimum grade point average of 2.00 , and has a highly extenuating, documented circumstance that would support a hardship exception to the requirement. The student must agree to register for and complete coursework by the December following the May Commencement Ceremony in which the student wishes to participate.

## OR

B. The student has no more than two* (2) courses remaining to complete degree requirements, has a minimum grade point average of 2.50 , and the student must agree to register for and complete coursework by the December following the May Commencement Ceremony in which the student wishes to participate.
*Students who have only to complete their student teaching practicum semester may be allowed to participate in commencement, and agree to register for and complete the student teaching requirement by the December following the May Commencement Ceremony in which the student wishes to participate.

Students wishing to appeal on one of these bases must do so in writing. The appeal must be accompanied by a printout of the student's degree audit and other appropriate documentation and submitted to the Vice President for Enrollment and Student Development no later than May 1 ${ }^{\text {st }}$. Decisions on such appeals will be made within one week of their submittal and are final.

## COMMENCEMENT HONORS

## Latin Honors

The baccalaureate degree is conferred with honors upon a student with a final overall grade point average of:

| Cum laude | $3.25-3.59$ |
| :--- | ---: |
| Magna cum laude | $3.60-3.79$ |
| Summa cum laude | $3.80-4.00$ |

To be eligible for Latin honors, a student must have completed all degree requirements and must have completed a minimum of 16 course-credits post-matriculation at Framingham State University.

## College Marshals at Commencement

At the conclusion of each fall semester, a college marshal will be selected for each college from the graduating seniors. This marshal will lead their college into the commencement venue and will be recognized at commencement. The college marshals will be nominated by faculty in each college and selected by the academic dean of each college or by the provost and vice-president of academic affairs in the event of an academic dean vacancy. Criteria for class marshals include the following:

- Completion of all graduation requirements for the spring commencement;
- Attendance at spring commencement;
- An overall GPA, determined at the conclusion of the fall semester immediately prior to commencement, of 3.70 or higher with a minimum of 16 courses taken at FSU ( 16 coursecredit);
- Must maintain good academic and student conduct standing until commencement;
- A substantial record of civic engagement, leadership, and service at the university and beyond.


## ACADEMIC STANDING

Academic Standing is the status that a student earns from their educational studies at an institution of higher education. Academic Standing at FSU is calculated at the end of each fall and spring semester.

## Good Academic Standing

To remain in good academic standing, an undergraduate student must maintain an overall GPA as follows:

| Number of Course-Credits Completed <br> (includes transfer course-credit equivalents) | Minimum GPA |
| :---: | :---: |
| $1-8$ | 1.70 |
| 9 or more | 2.00 |

In order to graduate from the University, a student must have an overall GPA of at least 2.00 and at least a 2.00 GPA in the major as well as a 2.00 GPA in any minors. Some departments may have additional graduation requirements, including higher GPA required in the major.

## Academic Warning

After grades are recorded at the end of each semester, students who have not achieved the minimum overall grade point average (GPA) for the number of courses completed are placed on academic warning for the following semester A student on Academic Warning must meet with their academic advisor within the first week of classes to review program requirements, course selection, course load, and commitments outside the classroom.

Students who are on academic warning will have their overall GPA recalculated after completing an incomplete, a grade change, or a summer or wintersession course at FSU. This may result in students moving to good academic standing following the summer or wintersession terms or upon completion of course-work for a course in which the student earned an incomplete or had a grade change.
When a student is on academic warning, they need more time to focus on their academics, therefore they:

1. May carry no more than the normal academic load (4 courses).
2. May participate in clubs, societies, or organizations officially recognized by the University, but they may not hold or run for office nor may they serve on University governance or other appointed committees.
3. May participate in club or intramural athletics, but they may not participate in intercollegiate athletics.

## Extended Warning

A student may be granted additional semesters of academic warning referred to as extended academic warning. Extended academic warning will be granted if the student's semester GPA is a minimum of 2.00 even if the overall GPA remains below the minimum required GPA. Students should be aware that new courses completed at FSU during the semester of academic warning will add to the total number of courses, possibly raising the required minimum overall GPA to a higher level. Courses that are repeated count only once in the number of courses and only the most recent grade counts for GPA calculation.

## Academic Suspension

Students who do not achieve good academic standing following the semester of academic warning may be suspended from the University. If a student is suspended from the University, the period of such suspension is one academic semester (fall or spring), during which the student is not a matriculated degree candidate at Framingham State University.
Suspended students may earn credit for courses taken at other institutions. However, consistent with the University's policy on transfer courses, grades from other institutions are not counted in computing the GPA, and therefore do not constitute a grade repeat. Students taking courses offcampus are therefore advised to enroll only in new courses that have not been previously attempted at Framingham State University.

## Suspension Appeals

Students who receive a notification of their academic suspension may petition the Academic Standing Committee for special consideration of reinstatement to continue for another semester. Students must submit an Academic Standing Appeal Form, within the time frame indicated in the letter of suspension, in order to be considered for reinstatement by the Academic Standing Committee.

The decision of the Academic Standing Committee is final and may not be appealed.

## Readmission after Academic Suspension

1. If a student has been suspended from the University for academic reasons, the student may request readmission. Applications for such readmission will be reviewed by the Academic Standing Committee.
2. Students who have been suspended must follow the degree requirements stated in the University Catalog at the time of return or under special circumstances, the catalog in effect when they were first admitted.

## ACADEMIC FRESH START READMISSION POLICY

Fresh Start Readmission Policy: Any student who has separated from Framingham State University due to voluntary withdrawal in good standing with an overall grade point average at or above 1.70 and less than a 2.00 , or due to academic suspension/dismissal and had an overall grade point average below 2.00 at the time of separation is eligible to apply for readmission under the Fresh Start policy under certain conditions:

- The period of separation from the University must be at least two (2) consecutive semesters.
- The student supplies evidence of personal growth during the period of separation, in the form of two letters of recommendation.

Applicants to Fresh Start will be reviewed by the Academic Standing Committee (ASC). Applications will be due August $1^{\text {st }}$ for Fall semester and December $1^{\text {st }}$ for Spring semester. When a student is accepted under the Fresh Start Policy, the previous Grade Point Average (GPA) will be cleared. Only courses taken after Fresh Start readmission will count toward the GPA. Previous courses in which a grade of C- (1.7) or better was earned will count as transfer credit toward graduation requirements but will not factor into the student's GPA. Under the Fresh Start policy, students must complete at least eight (8) FSU courses, five (5) in the major, with an overall GPA of 2.00 in order to receive an undergraduate degree from FSU. The Fresh Start policy may be exercised only once. Once a student exercises the Fresh Start, it may not be rescinded. The student's academic transcript will note the readmission status as Academic Fresh Start along with the semester the status commenced

## WITHDRAWAL FROM THE UNIVERSITY

In the event that a student wishes to withdraw from the University, these procedures must be followed:

1. A Withdrawal from the University form may be obtained from the Office of the Dean of Students, or online from the Office of the University Registrar Forms link, and signatures obtained on the form from the following offices, in the order indicated:
A. Dean of Students (or designee)
B. Residence Life (if in residence hall)
C. Financial Aid Office
D. Student Accounts/Bursar's Office
E. Office of the University Registrar
2. Students officially withdrawing from the University after the Course Add/Drop period and before the deadline of the Course Withdrawal period (prior to the end of the tenth week of the semester; see semester calendar) will receive a notation of "WX" in all courses. If a student chooses to withdraw from the University after the thirteenth week of the semester, they will receive a final grade in all courses. Students with extraordinary circumstances (such as documented hospitalization or sickness) should consult with the Dean of Students.
3. All forms must be returned to the Office of the University Registrar. Note: A student is not officially withdrawn from the University until the appropriate form has been completed and has been validated by the Office of the University Registrar. Non-attendance does not constitute withdrawal from the University.
4. Students should refer to the University's policy on refunds as outlined in the University Expenses section of this catalog.

## Reinstatement after Withdrawal from the University

A student who voluntarily withdraws from the University without completing baccalaureate studies may request to return to the University as a degree-seeking student via Reinstatement. This includes students who were in good academic standing or on academic probation at the time of their voluntary withdrawal (note: students who were later suspended must submit a Readmission application). Students who have been withdrawn for more than one (1) semester must follow degree requirements stated in the University Catalog at the time of return. Reinstated students must satisfy outstanding student conduct code sanctions and outstanding Student Account balances prior to their return to the University.

## SEMESTER LEAVE OF ABSENCE - UNDERGRADUATE

A Leave of Absence (LOA) is a temporary interruption of one's studies at Framingham State University (FSU) for either the Fall or Spring semester of the Academic Year (Intersession and Summer terms are excluded) for which the matriculated undergraduate student does not choose to enroll in classes. A Leave of Absence is related only to the student's continued enrollment at the University and is not recognized by federal regulations.
Students may choose to request a Leave of Absence (LOA) from the university for a period of time not to exceed two consecutive semesters at a time. A student may request up to four (4) Leaves of Absence (LOA) during their enrollment at the University.
Students granted a LOA retain their admitted student status and remain eligible for the following privileges:

- Retain the university requirements in place for their academic programs at the time of their first semester at Framingham State University (FSU);
- FSU student e-mail and myFramingham access;
- Priority and self-registration for the approved semester of return.

Students granted a LOA are not considered registered students and as non-enrolled students are not eligible for:

- Financial aid disbursements during the semesters while on LOA. Students on a LOA are reported to lenders and loan service agencies as "not enrolled" and need to contact lenders for information on possible repayment requirements;
- Enrollment verification since they are reported as "not enrolled," which could affect eligibility for health insurance, etc.;
- Use of Campus Facilities, Fitness Center, Computer Labs, Student Health Services, or Whittemore Library access and borrowing privileges;
- Campus Housing during their LOA;
- Participation in varsity or intramural athletics, student clubs or any FSU sponsored activity or organization;

Prior to returning from a Leave of Absence, a student is expected to:

- Meet with their academic advisor;
- Address any outstanding financial obligations to the University;
- Register for courses prior to the start of the semester in which the student is returning;
- Follow the degree requirements as identified in the catalog at the time the student originally matriculated. The academic department chair may authorize an exception.
NOTE: Students who do not return following the approved term for their LOA, or those students who did not apply for LOA, are no longer considered matriculated and need to request reinstatement to the University if they wish to continue their coursework. Reinstated students do not retain their original Catalog year program requirements and must follow the most current requirements for the degree and their major.


## Eligibility Requirements

To be considered for a Leave of Absence, students must be eligible to register for classes and meet the following criteria:

1. Be a matriculated degree-seeking undergraduate student;
2. Be registered during the semester immediately prior to the beginning of the LOA ;
3. Students who are participating in an FSU-sponsored study abroad program need not apply for a LOA; however, students who are participating in a non-FSU-sponsored study abroad program should take advantage of the LOA policy, if eligible;
4. Be eligible to attend the upcoming semester - cannot be on academic suspension at the end of the semester immediately prior to the beginning of the LOA;
5. Have no hold(s) (e.g., pending disciplinary status, financial, etc.) which would restrict registration. Note: Students with financial holds cannot be given consideration for a LOA.

## Timeline

A withdrawal from the university form may be obtained from the Office of the Dean of Students, or online from the Office of the University Registrar Forms link.

If a student requests the LOA before the end of the add/drop period, the request must be submitted to the Office of the University Registrar no later than the end of the Course Add/Drop period for the fall or spring semester. The University Registrar makes the final decision to approve or deny a request for a LOA based on the aforementioned criteria.

Students requesting a Leave of Absence after the end of the Course Add/Drop and before the deadline to Withdraw from the University will need to submit the request to the Dean of Students. The Dean of Students makes the final decision to approve or deny a request for a LOA after consulting with the University Registrar.
Registration information will be sent to the FSU email account and personal email account on file prior to the start of the next registration period and also approximately two weeks prior to the term the student is scheduled to return.
In order to remain active in the program before the Leave expires, the student must enroll in courses for the upcoming semester. The student may request to extend the Personal Leave of Absence for one (1) consecutive semester and must do so before the end of the Course Add/Drop period. Should the student not register once the Leave expires, the student will become Inactive (non-matriculated) at the University and will need to request reinstatement in order to resume their program of study.

## CONDUCT SUSPENSION OR EXPULSION

Students may also be suspended through the Office of Community Standards for violations of the Student Code of Conduct outlined in the RAM Student Handbook.

If a student withdraws from the University during the course of the community standards conduct resolution process, the process will continue as documented in the Student Code of Conduct. If the student is found responsible for violating the Student Code of Conduct leading to a Conduct Suspension or Expulsion after withdrawing or otherwise separating from the University, the documentation on the record for their separation from the University will be changed to Conduct Suspension or Expulsion.

## Readmission after Conduct Suspension or Expulsion

A student who is expelled from the University for conduct reasons may not apply for readmission.
A student who is conduct suspended from the University may petition for readmission to complete degree-seeking coursework at the end of the conduct suspension period by completing the readmission process. A student who has been suspended for conduct reasons and is granted readmission must follow the degree requirements stated in the University Catalog at the time of return.

## INSTITUTIONAL REVIEW BOARD

The Framingham State University Institutional Review Board (IRB) is responsible for protecting the rights and welfare of human subjects participating in research conducted at FSU. The FSU IRB reviews research in the following three categories:

1. Research that is federally funded;
2. Research for which the sponsoring agency requires federal-level institutional review; and
3. Research that is voluntarily submitted by an applicant(s) for a federal-level institutional review.

It is expected that individuals conducting research associated with the University do so in accordance with the highest ethical and moral standards and accepted practices within their disciplines.
Information about the FSU IRB and IRB-related documents may be accessed on the University's website.

## POLICY ON AUTHORSHIP

The following guidelines and best practices serve to set community standards for the valuable intellectual work that students and faculty at Framingham State University do together. As a primarily undergraduate institution that sets teaching and mentoring as a priority, the University holds that faculty and student collaborations are of great importance for our educational mission, and that are recognized and valued as part of the work that faculty do in order to fulfill the spirit and letter of our contract with the institution. Since faculty and student collaborations are happening daily as we engage in projects and inquiry in our classes, together they contribute to creative and analytical projects that are shared with wider audiences-either in conference presentations, peer-reviewed publications, or other forms of publication, including online sharing, shows, and performances.
These proposed guidelines are shared with the understanding that our accomplishments as scholar/teachers in a primarily teaching institution include institutional recognition of and value for the work of mentoring student research through faculty and staff authorship and shared creative and research endeavors.

## Acknowledgement of shared faculty and student work

Discussion about the amount and kind of credit to be given should occur at the start of an association between faculty or staff and students so that expectations are clear and the faculty or staff member and student can develop a shared understanding of what each person's obligations and recognition will be. It is recognized that these arrangements may change over time and discussion should be re-opened at that time.

## Guidelines for acknowledgement of student contributions to faculty work

Since it is a stated goal of this university to foster faculty-student collaboration and undergraduate research, these guidelines should be read to include rather than exclude students as co-authors of faculty publications. In this context, "publication" refers to papers, presentations and creative activities published in peer-reviewed professional journals, exhibitions, and/or festivals; projects and research presented at professional meetings and symposia; and performances outside the campus community. It does not include publications or exhibits in strictly "undergraduate" journals or shows.
Students should be considered as authors or co-authors when a project is substantially completed by the student, including data collection, analysis, writing of the final report, and executing creative production (e.g. capstone project, independent study, senior thesis), rather than a project for which the student only performs some closely supervised task (e.g. data transcription, routine data collection). In the latter case, students should be acknowledged but not listed as co-authors. If such work is contributed by all or most members of a class, perhaps even over several semesters, the faculty member should acknowledge, for example, the "Fall 2011-Fall 2013 classes in Anatomy and Physiology at Framingham State University."
Frequently, it is necessary to combine the results of several student projects, often over several years, to produce a final product that is worthy of publication. Under these circumstances, the faculty member will need to write the final paper, combining information and analysis from several student projects. The faculty member should be first author of such papers, with the students as coauthors.

## Guidelines for acknowledgement of faculty or staff contributions to student work

Faculty, as teachers and mentors, promote student learning and scholarship. As part of their teaching, faculty members commonly suggest topics for further study and advise students on methodologies that could be used in their course work. Faculty members also routinely assist students in their research/creative work and writing by providing detailed comments and critiques, by proposing alternative ways of communicating an idea, and by editing drafts. This by itself does not necessarily entitle the faculty to co-authorship. However, faculty members have a right to expect to be acknowledged and/or cited for their ideas and assistance. All authors, whether student or faculty members, have an obligation to properly cite works used and to credit ideas suggested to them by others, from both published and unpublished sources (e.g., oral communication).
Authorship credit should be based on intellectual contribution. Editing of a paper alone, does not confer co-authorship on the faculty member or editor. Acknowledgment of this assistance is appropriate. Editing that goes beyond simple correction of grammar, spelling, and punctuation in order to clarify meaning or to introduce new ideas or interpretation does make an intellectual contribution for which co-authorship would be appropriate. The names of the authors should be listed in the order of their relative contributions to the publication (including research design, data acquisition, art/design direction, analysis and preparation of the manuscript, and production of creative projects).

## NONDISCRIMINATION POLICY

It is the policy of Framingham State University not to discriminate in education or employment on the basis of race, color, religion, creed, sex, sexual orientation, age, disability, veteran status, marital status, or national origin. The University operates under an Equal Opportunity, Diversity, and Affirmative Action Plan, as approved by the Massachusetts Board of Higher Education (BHE) and the University's Board of Trustees, that promotes and maintains a policy of nondiscrimination, equal opportunity, and affirmative action. This plan incorporates by reference, and where applicable, the requirements of Titles VI and VII of the Civil Rights Act of 1964; Title VI of the Civil Rights Act of 1968; Titles I and II of the Civil Rights Act of 1991; Title IX of the Education Amendments of 1972 and its regulations found at 34 C.F.R. part 106; the Equal Pay Act of 1963; 72 1520495_1 Civil Rights Restoration Act of 1988; Sections 503 and 504 of the Rehabilitation Act of $197 \overline{3}$; the Americans with Disabilities Act of 1990, as amended; Section 402 of the Vietnam-era Veterans Readjustment Act of 1974, Uniformed Services Employment and Reemployment Rights Act; the Age Discrimination Act of 1975; the Age Discrimination in Employment Act of 1967, as amended; the Family and Medical Leave Act of 1993; the Genetic Information Nondiscrimination Act of 2008; the reauthorized Violence Against Women Act, Pub. Law No. 113-4 (2013); the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act; the Higher Education Act of 1965, as amended; Federal Executive Order 11246 of 1965, as amended by Executive Order 11375 of 1967; Federal Executive Order 12900 of 1994; Federal Executive Order 13145 of 2000; Federal Executive Order 13160 of 2000; Federal Executive Order 13166 of 2000; Massachusetts Civil Rights Act; Massachusetts General Laws Chapters 151B, 151C, and Chapter 149; St.2011, c. 199 (H3810), An Act Relative to Gender Identity; directives of the BHE, the Universities' Boards of Trustees and the Commonwealth; and other applicable local, state and federal constitutions, statutes, regulations and executive orders.

Inquiries or advice concerning discrimination and the application of these policies, laws and regulations may be referred:

| Kimberly R. Dexter | Inquiries may also be directed to: |
| :--- | :--- |
| Director of Equal Opportunity, Title IX, and ADA | The U.S. Department of Education |
| Compliance | Office for Civil Rights |
| Equal Opportunity Officer | 33 Arch Street, 9 Floor |
| Title II/Section 504 Coordinator | Boston, MA 02119-1424 |
| Dwight Hall, room 205 | 617-289-0111 |
| 508-215-5859 | Fax 617-289-0150; TDD 877-521-2172 |
| kdexter@framingham.edu | OCR.Boston@ed.gov |

Students may also contact:
Meg Nowak Borrego
Dean of Students
Equal Opportunity Officer for Students
McCarthy Center, suite 504
508-626-4596
mnowak1@framingham.edu
The University Title IX Coordinator is responsible for the University's compliance with Title IX and the administration of the University's Sexual Violence Policy. Any person with questions or concerns about any form of sexual violence, sexual harassment, gender-based harassment, domestic violence, dating violence and stalking and/or retaliation may also contact:

Kimberly R. Dexter
Director of Equal Opportunity, Title IX, and ADA
Compliance
University Title IX Coordinator
Dwight Hall, room 205
508-215-5859
kdexter@framingham.edu
Meg Nowak Borrego
Dean of Students
Title IX Coordinator for Students
McCarthy Center, suite 504
508-626-4596
mnowak1@framingham.edu

Carey Eggen<br>Associate Director of Athletics<br>Title IX Coordinator for Athletics<br>Athletic Center, $2^{\text {nd }}$ floor<br>508-626-4565<br>ceggen@framingham.edu<br>Inquiries may also be directed to:<br>The U.S. Department of Education<br>Office for Civil Rights<br>33 Arch Street, $9^{\text {th }}$ Floor<br>Boston, MA 02119-1424<br>617-289-0111<br>Fax 617-289-0150; TDD 877-521-2172<br>OCR.Boston@ed.gov

## Campus Resources

## THE ACADEMIC ADVISING CENTER (TAAC)

The Academic Advising Center, located in O'Connor Hall, is a resource for information on academic programs and support services. Undeclared students, or those who are contemplating a change of major, are especially encouraged to visit the Center. Staff members are available for individual conferences on choosing a major, academic planning in course selection and graduation requirements, and strategies for remaining in good academic standing.

## Academic Advising

Each incoming student is assigned a faculty member or professional staff member who serves as the academic advisor. Advisors assist students in relating their interests and abilities to career goals and in developing decision-making skills. They also provide information about University policies, procedures, and requirements, and make referrals to campus support services. Another of the advisor's primary roles is to guide students in designing their academic program, making course selections, and completing degree requirements.
It is recommended that students meet with their faculty advisors during their office hours on a regular basis. Advisees are encouraged to become familiar with the policies and degree requirements published in the University Catalog and to keep records of their course progress. During the pre-registration period in the Day School, students must meet with their advisors to obtain approval for course selection prior to registering for the following semester. Students should prepare for the advising session by planning a tentative schedule to be discussed with the advisor.

## Placement Testing

As required by the Massachusetts State Board of Higher Education, entering students will be tested in order to ensure proper placement in courses. Students will take tests to determine their abilities in languages, mathematics, and writing.
Dates and times for the examinations during the academic year will be determined prior the beginning of each semester. Please contact the Academic Advising Center for reservations.
Students may be exempt from each of these tests and place directly into courses based on the following criteria:

Language: All students who plan to study a language with which they have prior experience with must take the Language Placement exam in a semester prior to enrolling in the desired language course.
Students are not required to take the language placement test if they:

- speak another language fluently; or
- have no prior experience with the language they plan to study; or
- have transferred in a language course at the Elementary I level or higher; or
- have satisfied the MassTransfer General Education Foundation Block.


## Language Code Interpretation

## Code Placement

0 Student has not taken the Emmersion Placement test.
1 Earned a 1 in the Emmersion Placement test:
Eligible to enroll in Elementary I of the language in which the student tested.
2 Earned a 2 in the Emmersion Placement test:
Eligible to enroll in Elementary II of the language in which the student tested.
3
Earned a 3 in the Emmersion Placement test:
Eligible to enroll in Intermediate I of the language in which the student tested.
4 Earned a 4 in the Emmersion Placement test:
Eligible to enroll in Intermediate II of the language in which the student tested.
5
Earned a 5 or above in the Emmersion Placement test:
Eligible to enroll in a 200 -level course beyond Intermediate II of the language in which the student tested.

6 Waiver received from World Languages Department Chair. Students may petition for the waiver if their high school language is other than English (usually applies to international students).

## Math Placement Testing

FSU Mathematics Placement Pilot - for eligibility to enroll in MATH and STAT courses at Framingham State University.
I. Numbers, Arithmetic, Algebra (NAA): to determine if Recitation sections of 100-level MATH and STAT courses are required.
A. Two tiers of scoring:

1. Scores $<70 \%$ : Recitation 100 -level course required.
2. Scores $\geq 70 \%$ : Eligibility to enroll in 100 -level MATH and STAT courses other than MATH 180 Precalculus and STAT 157 Probability and Statistics; no recitation required for 100 -level courses; may take Functions Placement Exam.
II. Functions (FNC): to determine eligibility beyond MATH 123 Introduction to Functions.
A. Three tiers of scoring:
3. Scores $<40 \%$ : Eligibility to enroll in MATH 123 Introduction to Functions without Recitation.
4. Scores $\geq 40 \%$ and $<70 \%$ : Eligibility to enroll in MATH 180 Precalculus, STAT 157 Probability and Statistics, and STAT 203 Statistics for the Natural Sciences.
5. Scores $\geq 70 \%$ : Eligibility to enroll in MATH 219 Calculus I and MATH 206 Discrete Mathematics I (recommended consultation with the Mathematics Department).
Placement Exams are available on Canvas, offered at specific times during the calendar year; a single retake is possible upon request (must be completed during regular offerings).
Placement Policies: based on incoming HS GPA, adjusted.

- All STEM and AEF majors must take the NAA Placement Exam.
- All incoming students with High School GPA < 3.0: Must complete the NAA Placement Exam in order to be eligible for a 100 -level MATH or STAT course without Recitation.
o If no NAA Placement Exam score is recorded, students are placed into Recitation sections of 100 -level MATH or STAT courses and may not enroll in MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, or STAT 157 Probability and Statistics.
- All incoming students with High School GPA $\geq 3.0$ : Eligible for any 100 -level MATH or STAT course without Recitation other than MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, and STAT 157 Probability and Statistics.
o All students interested in enrolling in MATH 123 Introduction to Functions must take the NAA Placement Exam.

If displayed on degree audit, the PNAA code takes precedence over the PMTH code.
PFNC - FSU Math Placement Exam - Functions (FNC)
If displayed on degree audit, the PFNC code takes precedence over the PNAA code.
PTTR - Math Placement based on Transfer Credit
NOTE: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA
Exam, if MATH 123 was not accepted in Transfer.
Placement and Placement Code Explanation
Code


## PMTH:

10.0 Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
NOTE: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
10.3 Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation required.

Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam.

Note: All students interested in MATH 123 must take the Placement Exam regardless of PMTH code.

## PNAA:

11.0/11.3 Completed FSU Math Placement NAA Exam. Eligible to enroll in MATH 105R, MATH 110R, MATH 123R, STAT 107R, STAT 117R with Recitation
12.0/12.3 Completed FSU Math Placement NAA Exam.

Eligible to enroll in MATH 105, MATH 110, MATH 123, STAT 107, STAT 117 - No Recitation Required
(Excludes enrollment in MATH 180, STAT 157).
Note: Students are encouraged to take the FSU Math Placement FNC exam to determine eligibility beyond MATH 123
PFNC:
13.0/13.3 Eligible to enroll in MATH 123 - No Recitation Required.
14.0/14.3 Eligible to enroll in MATH 180, STAT 157, STAT 203.
15.0/15.3 Eligible to enroll in MATH 219, MATH 206 (Upon consultation with the Math Dept).

## PTTR:

## 0.0

No prior math transfer coursework received.
Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
Note: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
17.0 Remedial Mathematics Coursework completed at previous institution. Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.
19.0 Indicates college-level math course has been accepted in transfer.

Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required
Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.

Writing: First-Year, transfer, and continuing students will be placed through one of the following methods:

Placement by High School GPA
Three tiers of placement, as follows:

- Students with a High School GPA greater than 2.99 are automatically eligible to enroll in ENWR 110 Composition II.
- Students with a High School GPA between 2.70 and 2.99 , inclusive, are required to enroll in ENWR 105 Composition I. However, these students have the option to take the writing placement exam for a more advanced placement during one of the first two opportunities to do so.
- Students with a High School GPA lower than a 2.70 are required to enroll in ENWR 100 Introduction to College Writing with Studio. However, these students have the option to take the writing placement exam for a more advanced placement during one of the first two opportunities to do so.


## Placement by Test Score or Prior Coursework

Students with one of the following test scores or prior coursework will be automatically eligible to enroll in ENWR 110 Composition II:

- An SAT Critical Reading score greater than 600 (this is the version offered prior to March 2016)
- An SAT Reading score 32 or greater (this is the version offered since March 2016)
- An AP Language and Composition score of 3. A score of 4 or 5 receives transfer credit for ENWR 110 Composition II.
- Transfer of a course equivalent to ENWR 105 Composition I

Students without a High School GPA, appropriate test score, or prior coursework will also have two opportunities to take the writing placement exam. If they do not complete the placement exam, they will be placed in ENWR 100 Introduction to College Writing.

## Writing Code Interpretation

## Code Explanation

0.0-2.1 Student must enroll in and successfully complete ENWR 100 Composition I with Writing Studio before being eligible to enroll in ENWR 110 Composition II. Prior to the start of the semester, a writing placement test may be available.
2.3 Student must enroll in and successfully complete ENWR 105 Composition I before being eligible to enroll in ENWR 110 Composition II.
3.0 Student is eligible to enroll in ENWR 110 Composition II.
4.0 Student is eligible to enroll in ENWR 110 Composition II. Student has successfully completed non-credit preparatory coursework at another institution.
5.0 Student is eligible to enroll in ENWR 110 Composition II. Student has been awarded transfer credit equivalent to ENWR 105 Composition I.
9.0 Equivalent of ENWR 110 Composition II has been accepted in transfer.

## ATHLETICS

Athletics, located in the Athletic Center, offers a broad intercollegiate (NCAA Division III) and intramural program for men and women throughout the academic year. On an intercollegiate level, for women, Framingham State sponsors field hockey, cross-country, volleyball, soccer, basketball, lacrosse, and softball. For men, the following competitive teams represent Framingham State University: soccer, football, cross-country, hockey, basketball, and baseball. The Athletic Office is located in Room 111 of the Athletic \& Recreation Center, phone: 508-626-4614. Visit www.fsurams.com for more information regarding the teams and schedules.

## CAMPUS MINISTRY

Religious services, educational programs, and volunteer service opportunities are made available through the Campus Ministry office. The office also provides spiritual guidance and counseling for members of the Framingham State University community who are dealing with issues of faith or morality. The Campus Ministry Office is located on the fifth floor, Room 516, of the D. Justin McCarthy Center.

## CENTER FOR ACADEMIC SUCCESS AND ACHIEVEMENT

The Center for Academic Success and Achievement (CASA), located behind Peirce Hall, addresses the diverse academic needs and interests of the University community with programs, services, and facilities designed to promote academic achievement. All students at the University are encouraged to make use of the tutorial services, seminars and workshops, resources, and individual study accommodations offered at CASA. In addition, CASA provides academic support for students with disabilities

Among the resources offered at CASA are:

## The Math Center

The Math Center offers free drop-in tutoring in math to students who need help with the quantitative requirements for any course in which they are enrolled. Workshops and organized study groups are routinely scheduled for math and math-related courses. The Center also offers videotapes and computer-assisted learning modules for student use.

## The Writing Center

The Writing Center provides free tutoring in writing, drop-in or by appointment, to students seeking assistance with written coursework. Writing workshops, individualized writing skills assessment, and course-specific writing support groups are also featured.

## Students with Disabilities

Framingham State University, in compliance with the mandates of Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, offers opportunities to all students without regard to disabilities. No qualified person shall, on the basis of his or her disability, be denied the benefit of, or otherwise be subject to discrimination under any of Framingham State University's educational programs, activities, and employment opportunities.

FSU is committed to making such reasonable modifications and accommodations as are necessary to ensure that its programs and activities do not discriminate, or have the effect of discriminating, on the basis of disability. Prior to matriculation, students with disabilities are encouraged to contact the Director of Academic Support, via phone at 508-626-4906 to discuss specific accommodations and to request a disability services registration packet that includes the guidelines for documentation.

Students who have documents that support their request for academic and co-curricular support services, such as extended time for tests, note-takers, sign language interpreters, computer transcribers, and textbooks in alternative format, are required to submit their documentation to the Center for Academic Support and Advising (CASA). The file is maintained in the confidential Registry for Students with Disabilities located at CASA. The Director of Academic Support schedules individual conferences with each student to arrange for the appropriate support services. Inquiries regarding academic support should be directed to the Director of Academic Support at 508-626-4906.

There are four TTY's (telecommunications for the deaf) on campus: Admissions Office at 508-6264500 (V/TTY); Disability Services Office at 508-626-4627 (V/TTY); Public Safety and Police Services at 508-626-4911 or 508-626-4008 (TTY); and Whittemore Library at 508-626-4655 (TTY).

## COUNSELING CENTER

The Counseling Center, located in Foster Hall, enhances learning and personal development through its professional services which include individual, couples, family, and group counseling as well as outreach programs. Staffed by clinical social workers, social work interns, and a psychiatric clinical nurse, the Center assists students in exploring and coping with personal concerns. Confidentiality is assured to the fullest extent of the law. The Counseling Center is located in the Health and Wellness Center in Foster Hall.

## EDUCATION TECHNOLOGY OFFICE (ETO)

The Education Technology Office promotes and supports the "advanced technology" component of the University's mission. Office staff members administer Canvas as the University's Learning Management software for Web-based and Web-enhanced courses, provide planning and support for the academic components of the laptop program, and provide a wide range of professional development workshops in the Leonhard Multimedia Lab. The offices are located in Hemenway Hall G05 and G09.

## HEALTH SERVICES

Health Services, located in Foster Hall, functions as a center for the treatment of episodic illness and health maintenance. A staff of nurse practitioners, nurses and consulting physicians provides the management of acute and chronic illness, health education, and preventive medicine. In addition, the department sponsors and coordinates health education programs in cardiopulmonary fitness, weight management, women's health, substance abuse, skin cancer, integrative health, sexual assault and rape prevention.

Every student must submit the Framingham State University medical form. All students prior to class registration must meet the pre-entrance immunization requirements, based on Massachusetts Law No. 5871. The Medical History and Physical Exam portions must be completed in order to utilize Health Services and obtain resident housing. Specific requirements are detailed in the medical forms. The department also coordinates the Student Health Insurance Program. Questions regarding this state-mandated program may be directed to this office, located in the Health and Wellness Center in Foster Hall. Questions specific to health insurance billing/charges should be directed to Student Accounts.

## INFORMATION TECHNOLOGY SERVICES FOR STUDENTS

Framingham State University provides extensive computing capabilities to its students. The student network consists of a combination of general computer labs, academic/classroom computer labs, and residence hall labs. In addition, Framingham State University's wireless laptop program requires that all incoming freshman, transfer, and re-admit students own their own personal laptop, a requirement that came into effect in the fall of 2002.

Each student will receive their own Framingham State University network account, which will allow students access to the network. It will also provide students with disk space for the storage of academic related files. Every student will also receive a Framingham State University e-mail account, which can be accessed via the Internet

A wide array of software is available to students in classroom buildings. Among other applications, each workstation in the general and academic computer labs has Microsoft Office Professional, Microsoft Publisher and FrontPage, and Adobe Reader. Some machines also have special software such as Derive, SPSS and Minitab statistical research packages. In addition, departmental-specific software is available in departmental labs and on selected workstations in the general and academic computer labs.

The Student Helpdesk is located in Hemenway Hall G17, outside of the general computer lab. Staff members as well as Framingham State University students have been trained to assist their peers with computer-related issues at the Student Helpdesk. The Student Helpdesk is the first place for students to visit when needing any computer or technology related assistance. This desk is also available to provide basic troubleshooting and first-level diagnostic and network support for students' laptops.

Another resource for FSU students is the Laptop Repair Depot located on the lower level of the Arthur Doyle Information Technology Center (adjacent to Whittemore Library). The Laptop Repair Depot is where University-recommended laptops can be serviced and repaired after diagnosis from the Student Helpdesk.

## OFFICE OF INTERNATIONAL PROGRAMS - STUDY ABROAD \& INTERNATIONAL STUDENTS AND SCHOLARS

The Office of International Programs, located in Dwight Hall, is responsible for all international student programs and upholding the regulations governing their status as students. The Office provides international students with answers to questions and assists them in addressing and resolving issues and concerns that are unique to their status at the University. Support is provided to these students from the time they are accepted at the University throughout their academic experience. International students receive assistance with the many forms required by the Department of Homeland Security and are kept informed and updated on DHS regulations as they apply to their status as $\mathrm{F}-1$ Visa students.

The Office provides Study Abroad Program information on a wide variety of enriching opportunities that are available for students who are interested in studying abroad in many countries throughout the world; in obtaining internships in Europe, Australia and New Zealand; or in participating in exchange programs with universities in Quebec and Nova Scotia. The Office helps students explore their options and select appropriate programs to study abroad for a summer, a semester, or a year. The Office has many catalogs and reference books available for students as they select their programs and complete their applications. It provides students with information that facilitates approval of the courses that will ensure transfer credits toward graduation while participating in a study abroad program. Depending on a student's major, study abroad is ideal during the second semester of the sophomore year or during the junior year

The Office is located in Dwight Hall, Room 302. Additional information can be obtained by calling 508-626-4585

## LIBRARY SERVICES

The Henry Whittemore Library provides a combination of traditional and modern resources and services to the University's students, faculty, and staff. The Library has a main collection of over 200,000 volumes and over 60,000 resources on education in the Curriculum Library. The Library provides access to a variety of online databases and electronic journals for on and off-campus users. The Special Collections include rare books on the history of education, contemporary American poetry and travel, cookbooks, and children's literature. The Christa McAuliffe collection contains letters, documents, and other memorabilia related to the Teacher in Space program and the life of Christa McAuliffe. The College Archives include photographs, videotapes, journals, documents, Massachusetts and education history, and publications pertaining to the history of the University. This basic core of resources supports the curricula of all academic departments of the University and is systematically kept current with new acquisitions as selected by specialized staff and requested by faculty and students.

As a member of the Minuteman Library Network (MLN), the Library's holdings are supplemented by an online catalog (OPAC) accessing more than 5.2 million volumes held in the combined collections of 41 regional libraries. Inter-library loan requests may be placed electronically, and shuttle delivery moves such items to and from the Henry Whittemore Library. A similar volume of materials is electronically accessed and requested as needed from among the member libraries of the New England Library Information Network (NELINET) and the member libraries of the Online Computer Library Center (OCLC).

The Library offers access to approximately 50 electronic journal and newspaper databases with over 15,000 titles in full-text. These databases, as well as Internet access, are available within the library and throughout the campus-wide network.

Reference services, basic and course-related library instruction, and point-of-use guidance support effective delivery of computerized resources, while traditional library skills and research methods are taught as integral to the continuously evolving information technology. Electronic databases are also available to off-site students and faculty.

## RESIDENCE LIFE PROGRAM

The Office of Residence Life, located in Corinne Hall Towers, through programmatic and staff support, strives to facilitate an on-campus community environment fostering student learning, personal development, and valuing diversity. All residents are expected to share the responsibility for creating and maintaining positive living and learning environments. These goals require residents to be open to living cooperatively and working actively to cultivate a climate conducive to academic pursuit and respect for all. Please contact the Office of Residence Life to learn more about on-campus housing and the FSU residence life program.

## THE CENTER FOR STUDENT EXPERIENCE \& CAREER DEVELOPMENT

The Center for Student Experience \& Career Development coordinates, in conjunction with student clubs and organizations, a full program of social, cultural, recreational, and educational activities. The office emphasizes involving students in the planning process to provide valuable first-hand experience. Several leadership development opportunities are available for beginning to advanced student leaders. Through service and civic engagement programs, students can become actively involved in the local and global community. The office serves as a resource for information about on- and off-campus activities and is located on the 5th floor of the D. Justin McCarthy Campus Center.

## Career Development

Located in the McCarthy Campus Center, the office offers a wide range of career planning and job search resources. The office also provides individual career counseling and many career resources. Students are advised to use the office early and often during their studies.
Some of the office's programming includes career panels, and networking with alumni. Job and internship listings are also available on-line through the Career Services website. Students are strongly encouraged to participate in at least one internship, and many departments offer creditbearing courses for these experiences. Career counselors are available to assist with career planning, graduate school decisions, and the preparation of resumes and cover letters.

## New Student Orientation

Located in the McCarthy Campus Center, New Student Orientation programs are designed that help acclimate students to the University's academic, social and cultural expectations. This includes assisting students in their academic pursuits, encouraging involvement in campus life and establishing connections between faculty, staff and administrators that will make their experience a positive one.

## OFFICE OF VETERANS SERVICES

The Office of Veterans Services, located in Dwight Hall, recognizes the unique needs of servicemembers and returning veterans. The University welcomes the qualities of maturity, commitment, and leadership developed through military experience. Students are encouraged to use these qualities as active participants in the campus community. The Office of Veteran Services has been established to assist veterans and servicemembers gain the most from their educational experience. While providing assistance and support to promote a smooth transition from the military to the academic environment, the Office collaborates with departments campus-wide to assist veterans with available services.

## UNIVERSITY POLICE DEPARTMENT

The Framingham State University Police Department, located in the McCarthy Campus Center, is committed to providing protection for the lives and property of the University community. The Campus Police are professionally trained police officers that are licensed as Special State Police and sworn in as Middlesex County Deputy Sheriffs. The Campus Police perform the same duties as your local city or town police departments, conducting all investigations of incidents within their jurisdiction. The Department enforces state statutes, town ordinances and the rules and regulations of the University in an effort to promote a secure and safe campus. Some additional services provided by the department include non-emergency transportation to and from the local emergency room, motor vehicle lockouts, traffic control, court appearances and parking enforcement. The Department also provides personal safety-related programs throughout the year. Any group wishing to have a safety program for their organization, club, or class may contact the Framingham State University Police Department at 508-626-4911.

## Additional Educational Opportunities:

## COLLEGE ACADEMIC PROGRAM SHARING (CAPS)

College Academic Program Sharing (CAPS) is a program for the sharing of academic facilities by the students attending Massachusetts State Universities. Participating colleges include Bridgewater State University, Fitchburg State University, Framingham State University, Massachusetts College of Art, Massachusetts College of Liberal Arts, Salem State University, Westfield State University, and Worcester State University.

The primary purpose of this program is to offer the opportunity to students matriculated at one state university to take up to thirty (30) semester hours of college credit at another state university without going through the formal registration procedures. Interested students must file a request form by June $1^{\text {st }}$ for the fall semester and by December $30^{\text {th }}$ for the spring semester. NOTE: Priority seating availability is given to matriculated students at the host institution.

For more information, please stop by the Office of the University Registrar, McCarthy Campus Center, CC 515.

## THE WASHINGTON CENTER INTERNSHIP PROGRAM

The Commonwealth of Massachusetts, through the Board of Higher Education, has an agreement with The Washington Center (TWC) to provide scholarship assistance to students who participate in this internship. TWC offers semester and summer opportunities in Washington, D.C. for students to work in a government agency related to their career goals and interests. Students successfully completing the program, which includes 30 - to 35 -hours per week in an internship in addition to other required classes and the submission of a portfolio, earn three (3) Framingham State University course-credits.

## Academic Programs

## BACHELOR'S DEGREES

## BACHELOR OF ARTS:

| American Sign Language | Global Studies |
| :--- | :--- |
| Art History | History |
| Communication Arts | Liberal Studies |
| Criminology | Political Science |
| Economics | Sociology |
| English | Spanish |
| Environmental Studies and | Studio Art |
| $\quad$ Social Justice | World Languages and |
| Geospatial and Data Analysis | Linguistics |

## BACHELOR OF SCIENCE:

| Accounting | Health and Wellness |
| :--- | :--- |
| Biochemistry | Hospitality and Tourism |
| Biology | Management |
| Biotechnology | International Business |
| Business and Information <br> Technology | Management |
| Chemistry | Marketing |
| Child and Family Studies | Mathematics |
| Computer Science | Nursing* (R.N.'s only) |
| Environmental Sciences | Pre-Medicine and Human Health |
| Fashion Design | Pre-Veterinary Medicine |
| Fashion Merchandising | Psychology |
| Finance | Sports Management |
| Food and Nutrition | Wildlife and Environmental |
| Food Science | Biology |
| *This program requires students to have completed an associate's degree in the field. |  |

## BACHELOR OF SCIENCE IN EDUCATION:

Early Childhood Education
Elementary Education

## POST-BACCALAUREATE CERTIFICATE:

Pre-Health Studies

## MAJORS, CONCENTRATIONS, AND MINORS

Major: A program of study which cannot exceed 20 course-credits. The faculty prescribes the courses in the major field of study. The courses that constitute the major include all the major courses, required-related courses, and professional education courses.

Coordinate Major: A program of study offered by the Education Department leading to Initial Licensure in Elementary Education and Early Childhood Education. Students enrolled in this program major in the Interdisciplinary Major in Liberal Arts and Sciences or in a traditional discipline.

Concentration: A focused program of courses within the major. Generally, a concentration provides the student with a proficiency or competency in a specialty area within the major field.

Minor: A minor, consisting of a minimum of 5 courses, constitutes a program of study less extensive than that of a major. Although minors do not qualify as degree programs, approved minors are recorded on the transcript of a student who successfully completes the requirements. Minors are awarded only with the completion of a degree.
Within a broad range of purposes, a minor may:

- provide an academic emphasis in a department or provide a program of study in an interdisciplinary area,
- offer students an opportunity to pursue interests different from their major field, and
- help students to enhance their job potential upon graduation.

Minimum standards for acceptance into and completion of minors are the same as for majors. Specifically:

- A minimum of three (3) course-credits for the minor requirements must be completed in residence. Minor residency requirements may be partially fulfilled by courses taken through FSU Study Abroad Program. Such cases require approval by the appropriate department chair.
- A minimum GPA of 2.00 must be earned in the courses used for the minor.
- A student may not complete the minor version of their major, if one exists.
- Refer to the description of the minor for any additional specifications.


## COURSE RESIDENCY REQUIREMENTS

Degree: To complete the University residence requirement, a minimum of eight (8) course-credits ( 32 semester hours) must be taken at the University.

Major: To complete a major requirement, a minimum of five (5) course-credits (20 semester hours) in the major department must be taken at the University. Major residency requirements may be partially fulfilled by courses taken through FSU Study Abroad program. Such cases require approval by the appropriate department chair.

Minor: To complete a minor requirement, a minimum of three (3) course-credits (12 semester hours) in the minor department must be taken at the University. Minor residency requirements may be partially fulfilled by courses taken through FSU Study Abroad program. Such cases require approval by the appropriate department chair.

## PROGRAMS OF STUDY

Framingham State University offers 40 majors, including several interdisciplinary programs. Major, concentration, and minor requirements for specific disciplines are described in the department sections, which follow. The courses listed in each section are currently being offered within departments and programs. Many introductory courses are offered each semester or yearly; some courses are offered in alternate years. To ensure timely completion of requirements, students are encouraged to consult with their faculty advisor or department chair in planning their sequence of courses.

| Major | Department |
| :--- | :--- |
| Accounting |  |
| Concentrations in: | Finance |
| Accounting - General |  |
| American Sign Language | World Languages |
| Concentrations in: |  |
| $\quad$ Deaf Studies |  |
| $\quad$ English Interpreting | Art \& Music |
| Art History |  |
| Concentrations in: | Chemistry \& Food Science |
| $\quad$ General Studies |  |
| Biochemistry |  |
| Concentrations in: |  |
| ACS Approved Program |  |

## Biology

## Biology

Concentrations in:
Biology Teaching
General Studies

## Biotechnology

Biology
Concentrations in:
General Studies

## Business \& Information Technology

Management and Business \&
Concentration in:
Information Technology
Business

## Chemistry

Chemistry \& Food Science
Concentrations in:
ACS Approved Program
General Chemistry

## Child and Family Studies

Education
Concentrations in:
Community-Based Education
Early Education and Care (Birth-8)

## Communication Arts

## Communication Arts

Concentrations in:
Communication Studies
Computer Science
Concentrations in:
Computer Science General
Computer Science General with Cooperative Experience
Information Systems
Information Systems with Cooperative Experience

Note: Refer to the academic sections of the catalog for program descriptions.

## Major

## Criminology

Concentrations in:
General Studies

## Early Childhood Education

Concentrations in:
Initial Licensure Grades PreK-2
Non-Licensure

## Economics

Concentrations in:
Business
Economics - General
Finance

## Elementary Education

Concentrations in:
Initial Licensure Grades 1-6
Non-Licensure

## English

Concentrations in:
African American Literature
Children's and Young Adult Literature
Creative Writing
English Teaching
Film Studies
General Studies
Journalism
Professional Writing
Writing
Environmental Studies and Social Justice
Concentration in:
General Studies

## Environmental Sciences

Concentration in:
Environmental Science and Policy
Earth and Planetary Systems
Earth and Planetary Systems Teaching

## Fashion Design

Fashion Design \& Retailing
Concentrations in:
Apparel Design
Fashion Merchandising Fashion Design \& Retailing
Concentrations in:
Apparel Product Development
Retail Merchandising
Finance
Concentrations in:
Finance - General
Financial Planning

Education
Department
Sociology \& Criminology

Accounting, Economics, \&
Finance

Education

English

Environment, Society, \&

## Sustainability

Environment, Society, \& Sustainability


Accounting, Economics, \&
Finance

## Maior

Department

## Food and Nutrition

Nutrition \& Health Studies
Concentrations in:
Coordinated Program in Dietetics 4+1
Nutrition and Dietetics
Nutrition and Dietetics Education 4+1
Nutrition and Food Service Program Management

## Food Science

Concentrations in:
Applied Food Science
Food Science and Technology

## Geospatial and Data Analysis

Concentrations in:
General Studies
Global Studies
Concentration in:
General Studies

## Health and Wellness

Concentrations in:
Fitness
Public and Community Health

## History

Concentrations in:
General Studies
History Teaching (Secondary Education)

## Hospitality \& Tourism Management

Concentration in:
General Studies

## International Business

Concentration in:
General Studies
Liberal Studies
Concentrations in:
General Studies Individualized Studies

## Management

Concentrations in:
Entrepreneurship
Management - General

## Marketing

Concentrations in:
Marketing - General
Sales Marketing
Mathematics
Concentrations in:
General Studies
Mathematics Teaching (Secondary Education)

## Nursing

## Concentration in:

General Studies

Chemistry \& Food Science

Environment, Society, \& Sustainability

Political Science, Law, \& Global Studies

## Nutrition \& Health Studies

## History

Management and Business \& Information Technology

Management and Business \& Information Technology

History

Management and Business \&
Information Technology

Marketing

Mathematics

## Nursing

Major
Department

## Political Science

Concentrations in:
General Studies
International Politics
Pre-Law
Pre-Engineering

Political Science, Law, \&
Global Studies

## Environment, Society, \&

 SustainabilityThis program establishes a freshman and sophomore curriculum taken at FSU before transfer out to University of Massachusetts-Lowell, University of Massachusetts-Dartmouth, and the Massachusetts Maritime Academy and earning a Bachelor of Science degree in one of the engineering disciplines at those institutions.

## Pre-Medicine/Human Health <br> Biology

Concentrations in:
General Studies
Pre-Veterinary Medicine
Biology
Concentrations in:
General Studies

Psychology
Concentrations in:
General Studies

## Sociology

Concentrations in:
Anthropology
General Studies

## Spanish

Concentrations in:
General Studies

Sports Management
Concentrations in:
Sports Management - General
Studio Art
Concentrations in:
Art Education (with Education Minor)
Ceramics
Graphic Design
Illustration
Painting
Photography
Printmaking
Sculpture
Studio Arts

## Wildlife and Environmental Biology

Concentrations in:
General Studies

## World Languages and Linguistics

Concentrations in:
General Studies

Management and Business \&
Information Technology
Psychology \& Philosophy

Sociology \& Criminology
on Technology

Biology
World Languages

$$
10 y
$$

Art \& Music

## World Languages

## UNDECLARED MAJOR

A candidate for admission to Framingham State University may elect not to declare a major. Students who are admitted as undeclared students are encouraged to view their status as an opportunity to explore a range of fields of interest. Undeclared students must apply for a specific major prior to the onset of the junior year. The Associate Dean of Academic Affairs serves as chair of undeclared students.

Undeclared students are encouraged to visit the Academic Advising Center in O’Connor Hall for help in curriculum planning and exploration of possible majors. In addition, the Career Resource Center in the McCarthy Campus Center sponsors career workshops and offers individual career counseling that is particularly helpful to undeclared students.

## OFFICE OF CONTINUING EDUCATION

Matriculated students enrolling in undergraduate courses offered through Continuing Education may also complete undergraduate programs leading to the baccalaureate degree with majors in: Accounting, Business \& Information Technology, Computer Science, History, Liberal Studies, Management, Psychology, and Sociology.

## FIRST-YEAR SEMINAR POLICY

The University is committed to providing a First-Year seminar to aid students in a successful transition to college. All first-time, First-Year undergraduate students who matriculate in the fall semester shall enroll in either a RAMS First-Year Seminar, or a HNRS Honors First-Year Seminar for their first semester. All first time, First-Year undergraduate students who matriculate in the spring semester or who do not enroll in one of these options during fall semester shall enroll in a springsemester RAMS First-Year Seminar.

## RAMS 101 FIRST-YEAR SEMINARS

RAMS 101 First-Year Seminars are designed to help facilitate First-Year students' transition to the university setting by providing an opportunity to engage in a deep exploration of a significant topic or theme while being introduced to resources and strategies that support student academic success and integration into the university community. These seminars require subject-based reading, writing, and analysis in order to help students continue to develop essential academic skills and cultivate intellectual curiosity. Students further enhance their skills using evidence-based reasoning for decision-making and communication.

The First-Year Seminars use a small group setting to foster in-depth class discussion and a close relationship among the students, faculty member, and student peer-mentor. Offered through a specific academic department, the First-Year Seminars will have General Education status. Seminars scheduled with an HNRS Honors designation will be restricted to students in the Commonwealth Honors Program.

All RAMS 101 First-Year Seminars cover student success skills in addition to disciplinary content. Students success skills include coverage of topics in the following areas: academic skills, academic expectations, the terminology and structures of academia, resources and support on campus, and expectations as an engaged member of the university community.

To this end, all RAMS 101 First-Year Seminars will provide students with the opportunity to:

- Develop academic skills (such as taking effective notes, study skills, locating and evaluating sources, critical thinking, and effective communication);
- Recognize academic expectations (such as those pertaining to time management, tracking grades and deadlines, utilizing faculty office hours, professional communication, and expectations for college-level work);
- Understand the terminology and structures of academia (such as syllabi, course add/drop, course withdrawal, GPA, advising, registration, holds on accounts, majors/minors, prerequisites);
- Understand campus learning resources and support services (such as CASA, Whittemore Library, the Center for Inclusive Excellence, advisors, Career Services, Health and Wellness, Counseling Center, Financial Aid, Veterans Services);
- Understand the expectations as a member of the university community (such as creating an inclusive community, academic honesty, civic engagement, involvement in campus events).


## COMMONWEALTH HONORS PROGRAM

The Commonwealth Honors Program at Framingham State University is designed to provide academically talented students with the opportunity to enrich their college experience with courses both within and outside their major department. Courses bearing the "Honors" designation are drawn from a wide range of disciplines, and are designed to be intensive and intellectually challenging, drawing upon and developing students' creativity and analytical thinking skills.

Honors courses are designed for a maximum enrollment of 20 students to foster in-depth class discussion and a close student-instructor relationship. Some honors courses are restricted to "honors" participants, while others are offered as "split" courses with a core of honors students working within a larger classroom of students at large. Honors courses may be applied to the general education requirements specified by the University. Honors courses that are split may be taken by students, who are not participating in the Program, on a space available basis in the non-honors section of the course.

## Honors Program Admission Requirements

Incoming First-Year Student Admission: First-Year students are selected for the Honors Program based on their high school curriculum, recalculated grade point average, and demonstrated potential for superior academic work at the university level.
Incoming Transfer Student Admission: Transfer students in academic good standing in the Commonwealth Honors Program at another Massachusetts public institution automatically meet the Honors Program selection standards.
Continuing Student Admission: Matriculated students not initially selected to participate in the Honors Program may request selection after completing at least one semester of coursework (minimum of 3 course credits) at Framingham State with a minimum GPA of 3.20. Matriculated students are not eligible for Honors Program selection after completing five (5) or more general education course credits. A brief statement of intent and an unofficial transcript must be presented to the Faculty Director of the Honors Program by January 10 (to join Honors program in spring) or June 10 (to join Honors program in fall).

## Honors Program Completion Requirements

Participants in the Framingham State University Honors Program must complete a minimum of six (6) course credits bearing the honors designation, including a RAMS First-Year Seminar with an Honors designation (HNRS) and the honors capstone course HNRS 480 Honors Program Thesis/Project. The remaining four (4) course credits must be fulfilled through approved honors sections of regular 100- and 200-level courses carrying a general education designation. However, students may choose to substitute one (1) upper-division course in their major program of study (300or 400-level) for one of these four elective Honors courses by submitting an honors contract in which the student and instructor devise or enhance a project within the course emphasizing advanced, independent research on a particular subject. Students pursuing Educator licensure in addition may substitute a designated honors section of either EDUC 110 Education in American Society or EDUC 200 Education in American Society with Field Study I. All students must complete a minimum of three (3) courses with the honors designation at Framingham State University, including HNRS 480 Honors Program Thesis/Project.

As a condition of continued enrollment in the Honors Program, a freshman or sophomore must maintain a GPA of no less than 3.00 overall; a junior or senior must maintain a GPA of 3.20 or greater. In addition, a student must earn a minimum grade of B (3.0) in each honors course (including the thesis) in order to count toward the program requirements. Students may not go more than one semester without taking an Honors course prior to the completion of First-Year and program elective requirements, but may wait to take HNRS 480 Honors Program Thesis/Project without penalty. Students who fail to satisfy these requirements are allowed to continue in the program for a probation period of one year (freshmen and sophomores) or one semester (juniors and seniors). Subsequent continuance is at the discretion of the Honors Council.

In 2011, the Framingham State University Honors program received Commonwealth Honors designation from the Board of Higher Education. Participation in the Framingham State University Honors Program is noted on the students' transcripts. Students successfully completing the program are also designated as Commonwealth Honors Scholars on their academic transcripts.

## PRE-PROFESSIONAL PROGRAMS

## Pre-Health Studies Curriculum for Students Interested in the Health Professions

Advisors: Steven Cok, Chemistry \& Food Science Department
Shelli Waetzig, Chemistry \& Food Science Department
This program is intended for students interested in pursuing medicine (either as a doctor (MD or DO), or physician's assistant (PA)), dentistry (DMD or DDS), pharmacy (PharmD), nursing (APRN or DNP), or other healthcare professions (i.e. physical therapy, occupational therapy, veterinary). Each track/profession has a different set of course requirements. For most pre-medical/pre-health professions, majoring in either Biology (Pre-Health Concentration) or Biochemistry (General Concentration) fulfills most or all of these course areas. At FSU, students can choose any major while still fulfilling the required courses to apply to these programs. Some of the required or recommended pre-professional courses are fulfilled through appropriate selections from the General Education program at Framingham State University, including courses in English composition and literature, psychology, and sociology. Pre-professional students should meet with one of the pre-professional curriculum advisors no later than the beginning of their sophomore year and continue to meet periodically. This contact will ensure that students complete the specific requirements for the professional programs to which they intend to submit applications, since each program and institution has varying admissions requirements, which can also include clinical hours or national exams (i.e. MCAT, DAT, CASPer). Please note that the application process is highly competitive for all types of professional schools. Students with a final overall GPA of 3.50 or higher are more likely to gain admission to professional school programs.

## Pre-Engineering

Advisor: Kristen Chon, Environment, Society, \& Sustainability Department
This program, in cooperation with the University of Massachusetts-Lowell, University of Massachusetts-Dartmouth, and the Massachusetts Maritime Academy, establishes a freshman and sophomore curriculum leading to a Bachelor of Science degree in one of the engineering disciplines. A typical student accepted into this program will study for two or for three years at Framingham State University and complete the program at one of the three universities, earning the degree from that institution. Pre-Engineering students who complete the program with a "B" average (GPA = 3.00 or better) are guaranteed admission in the engineering program at each university campus. Those students with a "C" average will probably be accepted, but their transfer cannot be guaranteed. Other students may choose to remain at Framingham and complete their program of studies in a major such as biology, chemistry, or computer science. (For further information see Environment, Society, \& Sustainability Department section.)

## Pre-Law

Advisor: David Smailes, Political Science Department
Since law schools do not require or recommend specific undergraduate majors, the University does not offer a prescribed pre-law program, although the Political Science Department offers a minor in law and politics. Students are encouraged to choose a major and courses that emphasize reading, writing, and speaking, as well as analytical skills. Students contemplating a career in law should plan their curriculum under the guidance of both major and pre-law advisors.

## 3 + 3 BACHELOR'S/JURIS DOCTORATE PROGRAMS

## Suffolk University Law School

The $3+3$ program enables students to attend Suffolk Law School after three years of study at Framingham State University (FSU). This is an accelerated program that allows the participants to complete their undergraduate studies and law degree in six (6) years. Courses that students take in their first year of law school will count as free electives at FSU, which will allow them to complete their undergraduate degree requirements. Students choosing an accelerated program or those choosing to complete their undergraduate general education and major program requirements in three (3) years would be eligible. The Bachelor of Arts or Bachelor of Science is awarded following the successful completion of the first year of law school (as noted on an official transcript sent from Suffolk University).

Interested students should meet with their major academic advisor and the Pre-Law Advisor no later than the start of their sophomore year in order to determine that they can complete all necessary undergraduate courses and credits by the end of their Junior year. The Pre-Law Advisor for Framingham State University is Dr. David Smailes.

Selected students start at Suffolk University Law School after their junior year at Framingham State University. Students may apply to the Suffolk Law School program no later than April $1^{\text {st }}$ of their junior year at FSU.

## Matriculation Requirements to Suffolk University Law School

- Maintain at least a 3.30 overall GPA while at FSU;
- Obtain a Law School Admissions Test (LSAT) score equal to or greater than the Suffolk University Law School's median score of the prior year;
- Provide at least one (1) letter of academic recommendation from an FSU faculty member by January $1^{\text {st }}$ prior to the fall start in law school;
- Submit a completed Suffolk University Law School application no later than April $1^{\text {st }}$ of their junior year at FSU (Suffolk University Law School will waive the application fee);
- Complete required Framingham courses before beginning at the law school, including all major program requirements and General Education requirements, which need to be completed by the end of the student's junior year.


## University of Massachusetts-Dartmouth Law School

The $3+3$ program enables students to attend University of Massachusetts-Dartmouth Law School (UMass Law) after three years of study at Framingham State University (FSU). This is an accelerated program that allows the participants to complete their undergraduate studies and law degree in six (6) years. Courses that students take in their first year of law school will count as free electives at FSU, which will allow them to complete their undergraduate degrees. The program is very demanding and geared towards a select group of students. Students who demonstrate a commitment to the mission of Framingham and UMass Law are highly appropriate candidates. Students choosing an accelerated program or those choosing to complete their degree requirements in three (3) years would be eligible. The Bachelor of Arts or Bachelor of Science is awarded following the completion of the first year of law school.

Selected students start at UMass Law after their junior year at Framingham State University. Students may apply to the UMass Law program at the end of the 1 st semester of their freshman year through the end of their sophomore year. Completion of the program will yield a baccalaureate degree from Framingham as well as a juris doctor from UMass Law.

## Matriculation Requirements to UMass Law

- In compliance with American Bar Association Standard 502, successful completion by the end of the junior year of at least three-fourths of the credits leading to a bachelor's degree (i.e., the students must complete at least 24 graduation credits or 96 hours);
- Earned a 3.00 grade point average (GPA) during the three years of FSU undergraduate study;
- Satisfied all major requirements and satisfied all general education requirements;
- A minimum score of 150 on the Law School Admission Test (LSAT);
- Satisfy the character and fitness requirements appropriate for admission to law school;
- Fulfillment of all admissions requirements normally imposed by UMass Law, including but not limited to:
o Completing a law school application for basic information and to register for the Credential Assembly Service (CAS) through the Law School Admissions Council (LSAC) by December of the student's junior year at FSU;
- An accepted student to the UMass Law Program can defer for one year without penalty. The student has to enroll the following year. If not, the student will no longer be in the UMass Law Program;
- Failure to meet the above criteria will result in the student being withdrawn from the $3+3$ program. The student may apply through the regular process as a candidate for admission to the law school following the completion of the undergraduate degree.
- If a student is lacking one or two courses to satisfy their major or general education requirements, they may be given the summer session following their junior year to complete these courses.


## 4 + 1 BACHELOR'S/MASTER'S PROGRAMS

## Bachelor of Science with a major in Biology/Professional Science Master's with a concentration in Biotechnology (BS/PSM)

This program combines undergraduate and graduate training in a scientific discipline, plus the components of business and regulatory training. This will prepare undergraduate Biology majors for a career in the pharmaceutical industry, government or healthcare industry, with just one additional year of school to complete the Professional Science Master's with a concentration in Biotechnology, specialization in Quality Assurance. The BS/PSM degrees program can be completed in a period of five years - four undergraduate years and one year of graduate studies - and is intended to focus on training highly motivated undergraduate juniors with applicable scientific and professional skills for the biotech industry.

## Bachelor of Arts with a major in English/Master of Arts with a concentration in English (BA/MA)

This program prepares students for high school or community college teaching, as well as graduate studies in English at the Ph.D. level, pre-professional studies in law and library science, and for careers in communications, public relations, publishing, marketing, information sciences, human resources, and business and public administration. Students in the Bachelor of Arts in English program will have the opportunity to further develop and refine their writing and communication skills, think critically and creatively, and use emerging information technologies in the pursuit of advanced research in their graduate courses for the Master of Arts concentration in English.

Bachelor of Arts with a major in Political Science or a Minor in Public Administration/Master of Public Administration with a concentration in Public Administration (B/MPA)
This $4+1$ program provides students the opportunity to complete course work at the undergraduate and graduate level that will prepare them for a career in the public sector, including work in government and non-profit organizations, positions in the private sector who are involved with and affected by governmental activities, and careers in government at the management level. In this period of increased interdependency among the public, non-profit, and private sectors, the program is dedicated to the increased responsibilities and challenges confronting the public manager.
Bachelor of Science with a major in Food and Nutrition with concentration in Coordinated Program in Dietetics/Master of Science with a concentration in Food and Nutrition with specialization in Coordinated Program in Dietetics (BS/MS)
This program combines undergraduate and graduate Coordinated Program in Dietetics (CPD) and includes both the academic requirements and the supervised practice requirements which qualify students to take the Registration Examination for Dietitians upon graduation. Upon successful completion of this $4+1$ program, students are eligible to receive a Verification Form, required to document eligibility to take the Registration Examination for Dietitians.

Bachelor of Science with a major in Food Science/Master of Science with a concentration in Food and Nutrition with specialization in Food Science \& Nutrition Science (BS/MS)
This program combines undergraduate program in Food Science with the graduate program in Food and Nutrition with a Specialization in Food Science and Nutrition Science. This program prepares undergraduate Food Science majors for a career in the food science industry or for graduate studies at the Ph.D. level in Food Science or a related field. Students in the program will have the opportunity to further develop their knowledge of food science and their laboratory skills by exploring a research problem dealing with food or nutrition science, food processing technology, food engineering, or food biochemistry resulting in a master's thesis.
Bachelor of Science with a major in Food and Nutrition with concentration in Nutrition and Dietetics Education/Master of Education with a concentration Nutrition Education (BS/MEd)
This program combines undergraduate the Nutrition and Dietetics Education concentration with the master's program to complete their master-level work prior to or potentially concurrently with dietetic internship programs, thus enabling them to sit for the registered dietitian nutritionist exam upon completion of their post-graduate dietetic internships. It will also allow our students to be more competitive for dietetic internships.

## Bachelor's/Master of Education with a concentration in Secondary Education specialization in English, History, Mathematics, or Visual Arts (B/MEd)

This program combines an undergraduate degree with a major in English, History, Mathematics, or Studio Art with the Master of Education with concentration in Secondary Education. The graduate program is an advance study of education combined with the requirements for Initial Licensure in the areas of English Grades 5-12, History Grades 5-12, Mathematics Grades 5-8 or 8-12, and Visual Arts Grades PreK-8 or 5-12.

## Bachelor's/Master of Education with a concentration in Special Education Moderate Disabilities (B/MEd)

This program combines an undergraduate degree with the Master of Education with concentration in Special Education (Moderate Disabilities) to prepare candidates to work with children and young adults with diverse learning needs. Candidates learn to support literacy and numeracy development, communication skills, and social \& emotional learning of students with moderate disabilities Grades PreK-8 or 5-12. This program leads to an initial license as a Teacher of Students with Moderate Disabilities in Grades PreK-8 or Grades 5-12.

## Bachelor's/Master of Science with a concentration in Organizational Leadership (B/MS)

This program combines an undergraduate degree with the Master of Science with concentration in Organizational Leadership is structured to prepare entry level professionals for future leadership and management roles in today's increasingly complex organizations. Students learn to link theory with practice, and to recognize the ethical, leadership, and multi-disciplinary demands of organizational environments that are increasingly global, diverse, and geographically/culturally diffuse. This program offers in-depth study in leadership principles and management, including organizational psychology, change management, and innovation and disruption. This concentration emphasizes quantitative and qualitative data, and scientific methods and analysis, while focusing on three key areas necessary for success as new entrants in the business world based on sound scientific reasoning practices. Graduates are better prepared for employment in both the private and public sector, such as with non-profits and governmental agencies.

## DEPARTMENTAL HONORS PROGRAM

This program affords qualified students the opportunity to do extensive study in an area of interest not usually pursued in regular academic work. The completed thesis is recorded on the student's transcript and is placed on permanent file in the library. Distinction for completing the departmental honors thesis is also noted at commencement. Students should consult their department chair to initiate their enrollment in the departmental honors program.

Students are eligible for this program if they have a grade point average of 3.00 or higher for the entire sophomore year, or for the last semester sophomore year plus the first semester junior year. The 3.00 cumulative grade point average must include a minimum of four (4) course-credits taken at Framingham State University. Students undertaking this program may elect to omit one elective course in the senior year, substituting the final work of this research project for the course omitted. Course substitution must be approved by the student's academic advisor and department chair. The program is carried on under the direction of a faculty advisor. The choice of the faculty advisor and the actual program of study are matters of mutual agreement between the student and the faculty member. Students may begin work any time after qualifying and must continue for at least two semesters.

## MINORS

To complete a minor requirement, a minimum of three (3) course credits ( 12 semester hours) in the minor must be taken in residence at the University.

| Accounting | History |
| :--- | :--- |
| African American Literature and Film | Hospitality and Tourism Management |
| American Sign Language | Information Systems |
| American Studies | Information Technology |
| Anthropology | International Business |
| Apparel Design | Irish Studies |
| Art | Journalism |
| Art History | Latin American, Caribbean, and United |
| Biochemistry | States Latino Studies |
| Biology | Law and Politics |
| Black Studies | Marketing |
| Business Administration | Mathematics |
| Chemistry | Math for Elementary Education |
| Child and Family Studies | Media, Culture, \& Society |
| Children's and Young Adult Literature | Museum Studies |
| Communication Arts | Music |
| Computer Science | Neuroscience |
| Creative Writing | Nutrition |
| Criminology | Philosophy |
| Data Science and Analytics | Physics |
| Digital Humanities | Political Science |
| Diversity Studies | Portuguese |
| Earth and Planetary Systems | Professional Writing |
| Economics | Psychology |
| Education | Public Administration |
| English | Public Health |
| Entrepreneurship | Sales |
| Environmental Engineering | Science Communication |
| Environmental Science | Secondary Education |
| Environmental Studies and Social Justice | Science, Technology, Engineering, and |
| Fashion Merchandising | Mathematics (STEM) |
| Fashion Studies | Social Studies |
| Film Production | Sociology |
| Film Studies | Spanish |
| Finance | Sports Management |
| Food Science | Statistics |
| Gender Studies | Strategic Communication |
| Geographic Information Science | Sustainable Food Systems |
| Geography | Theatre |
| Graphic Design | World Languages and Linguistics |
| Health and Wellness | Writing |
|  |  |

## INTERDEPARTMENTAL MINORS

An Interdepartmental Minor shall consist of a designated number of courses, which must be taken in at least three different subject areas. The University offers minors in the following areas:

| American Studies | Media, Culture, and Society |
| :--- | :--- |
| Artificial Intelligence | Museum Studies |
| Black Studies | Neuroscience |
| Data Science | Public Health |
| Digital Humanities | Science Communication |
| Diversity Studies | Science, Technology, Engineering, and |
| Gender Studies | Mathematics (STEM) |
| Information Technology | Social Studies |
| Irish Studies | Sustainable Food Systems |
| Latin American, Caribbean, and United |  |
| $\quad$ States Latino Studies |  |

A description and course requirements of each Interdepartmental Minor can be viewed in the Interdisciplinary section of this catalog.

## Course Information

## COURSE-CREDIT

With the introduction of the Course Credit program in 1971-1972, unless noted otherwise, each Framingham State University course is equivalent to four (4) credits (sixty (60) contact hours) for internal and external transfer use. Practica and lab sections may carry a value up to one (1) credit or 0.25 courses. Courses that are the equivalent of two (2) credits or 0.5 courses (thirty (30) contact hours) are also offered at the University. Because each credit is the equivalent of 0.25 courses, transfer courses that bear 3 credits (forty-five (45) contact hours) are the equivalent of 0.75 courses.

Students in all majors must complete a minimum of 32 courses and a minimum of 128 credits. At least 10 courses (depending on the student's major) must satisfy the general education requirements. If the major requirements and the general education requirements total fewer than 32 courses (128 credits), students must take enough free electives to make up the difference.

Professional Development Graduate coursework, 70000-level, may be the equivalent to four (4), three (3), two (2), or one (1) credit(s).

## CREDIT HOUR: FEDERAL DEFINITION

The federal definition states that "a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:

- one hour of classroom or direct faculty instruction and a minimum of two hours of out-ofclass student work each week for approximately fifteen weeks;
or
- at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work and other academic work leading toward the awarding of credit hours."


## COURSE LEVEL

The numbers following the subject code indicate the course level:
000-099 Non-credit courses;
100-199 Undergraduate courses that are introductory in nature, assuming no prior college level exposure to the discipline;
200-299 Undergraduate courses appropriate for students with prior exposure to the university regimen or to the discipline, some with prerequisites;
300-399 Upper level undergraduate courses that build on previous exposure to the discipline, most with prerequisites;
400-499 Senior level undergraduate courses, most with prerequisites, including independent studies, internships, seminars, directed studies, and practicum;
600-699 Courses for public service undergraduate credit (not for degree programs - Exceptions may be made by Major Department Chair);
700(00)-799(99) Courses for public service and professional development graduate credit (not for eligible for degree programs at FSU);
800-899 Courses for graduate program credit but taught as dual level with the appropriate undergraduate course number assigned;
900-999 Courses assigned as graduate program credit only.

## COURSE DESCRIPTIONS

Under each course number and title is a brief description of its content, followed by a statement on prerequisites, if any, explaining the requirements for admission to the course. Courses appropriate for general education are identified by Gen. Ed. Domain following the course title. Lab science courses will have Lab following the course title.

## COURSE PREREQUISITES

It is the student's responsibility to be aware of and have met prerequisites prior to attempting any course. Course prerequisites may be found in the University Catalog as part of the course description.

## DEFINITIONS OF COURSE DELIVERY METHODS:

Course Expectations - All of the course delivery methods listed below are not self-paced. Faculty generally provide a list of topics and assignments with due dates for the semester in the course syllabus. You should expect to spend a minimum of 12 hours per week on each course; this will include any FACE-TO-FACE or REMOTE (Synchronous) class time.
Please note the following definitions:
Synchronous - The course meets at specific days and times, which are listed in the course schedule, and you will attend class at those specified times. For lectures, discussions, and presentations there is real-time interaction between the faculty and the students. Synchronous refers to both FACE-TO-FACE (i.e. in-person on campus) and REMOTE delivery methods. (Examples of remote include Zoom, Canvas, or other similar platform).
Asynchronous - The course or a portion of the course has no meeting days and times. You will not attend class at a set time, but rather access pre-recorded lectures and/or digital curriculum materials at a time of your own choosing but within the timeframe specified in the course syllabus. Interactions between faculty and the class occur through FSU email, discussion boards, social networking, and/or collaborative documents. Asynchronous refers to the ONLINE delivery method.
Hybrid- A combination of Synchronous and Asynchronous delivery methods.

A Building and Room Number will be listed as the course Location on your course schedule. You will need report to this building $\&$ room on the specific course day and time as the class will be delivered in-person.
REMOTE (Synchronous)
Course Location will show as REMOTE. The course is considered synchronous (instructor and students all meet together at the same time) and will be delivered via video conferencing software. You will connect via video conferencing software for your course at the specific day and time noted on your schedule. You will be able to see and interact with your instructor and classmates in a virtual environment.
FACE-TO-FACE (F2F) and REMOTE (Synchronous)
A Building and Room Number will be listed as the course Location on your course schedule. You will need report to this Building and Room Number on the specific course day and time for the portion of your class delivered in-person. And for the course Location designated as REMOTE, the instructor and students all meet together at the specific day and time via video conferencing software.
ONLINE (Asynchronous)
Course Location will show as ONLINE. The course will be offered entirely online (asynchronous), most likely through Canvas, without the constraints of having to log on at a certain time or be at a certain place. You will need to meet the assignment deadlines outlined in the instructor's course syllabus.
HYBRID OPTIONS (Combination of Synchronous \& Asynchronous)
Some courses will be offered combining Synchronous and Asynchronous delivery methods:

FACE-TO-FACE (F2F) and ONLINE (Combination of Synchronous \& Asynchronous) You will have a Building and Room Number listed in Location for a certain day/time, and will also see ONLINE listed. A portion of the course is taking place F2F on campus in the Building and Room Number assigned and the rest asynchronously ONLINE, meaning you are not expected to join the class at times other than those listed. However, you may be expected to access prerecorded lectures and digital curriculum materials and participate in online discussion forums at a time of your own choosing but within the timeframe specified in the instructor's course syllabus.
REMOTE and ONLINE (Combination of Synchronous \& Asynchronous)
You will have REMOTE listed in Location for a certain day/time, and also see ONLINE listed. A portion of the course is taking place as REMOTE (synchronously) and the rest asynchronously ONLINE, meaning you are not expected to join the class at times other than those listed. However, you may be expected to access pre-recorded lectures and digital curriculum materials and participate in online discussion forums at a time of your own choosing but within the timeframe specified in the instructor's course syllabus.

When viewing courses through myFramingham or the Student Schedule Planner, please see Instructional Method and Building for the information regarding the delivery method for each course section.

In order to help identify the course delivery method (modality) when viewing just the course subject prefix/course number/section code, the third character of the section number will be one of the following:

Third Character of the Course Section:
1, 2, etc. indicates Face2Face (In-person) Synchronous
Examples: ANTH $16100 \underline{1}$, EASC $10100 \underline{2}$

R Indicates Remote Synchronous
Examples: ANTH 161 01ㅁ, EASC 101 02R
M Indicates Mixed Face2Face \& Remote Synchronous
Examples: ANTH 161 01쓰, EASC 101 02M
A Indicates Online Asynchronous
Examples: ANTH 161 01 $\underline{A}$, EASC 101 02 $\underline{A}$
H Indicates Hybrid: Face2Face (In-person) Synchronous/Online Asynchronous
Examples: ANTH 161 01배, EASC 101 02 $\underline{H}$
Y Indicates Hybrid: Remote Synchronous/ Online Asynchronous
Examples: ANTH 161 01Y, EASC 101 02Y

## UNDERGRADUATE COURSES

## COURSE SUBJECT CODES

Each course offered at the University has a four-character subject code and a three-digit course number, e.g., ENWR 110.

| SUBJECT PR | PREFIX CODE |
| :---: | :---: |
| Accounting | ACCT |
| American Sign Language | ASGN |
| American Studies | AMST |
| Anthropology | ANTH |
| Applied Statistics | STAA |
| Art History | ARTH |
| Art Theory | ARTT |
| Astronomy | ASTR |
| Bilingual/Biliteracy Education | on BBED |
| Biology | BIOL |
| Biotechnology | BIOT |
| Business Analytics | BUAN |
| Business Information Systems | ns BUIS |
| Chemistry | CHEM |
| Child and Family Studies | CFST |
| Chinese | CHIN |
| Commonwealth Honors Program | gram HNRS |
| Communication Arts | COMM |
| Computer Science | CSCI |
| Counseling Psychology | CPSY |
| Criminology | CRIM |
| Data Science | DASC |
| Deaf Studies | DFST |
| Departmental Honors Thesis | DHNR |
| Digital Humanities | DGHM |
| Early Childhood Education | ECED |
| Earth Sciences | EASC |
| Economics | ECON |
| Education | EDUC |
| Education Licensure | EDIL |
| Education Practicum | EDPS |
| Elementary Education | ELED |
| Engineering | EGNR |
| English | ENGL |
| English - Writing | ENWR |
| Entrepreneurial Studies | ENTR |
| Environment, Society, and Sustainability | EVSS |
| Environmental Science | ENVS |
| Fashion | FSHN |
| Fashion Design | FSHD |
| Fashion Merchandising | FSHM |
| Finance | FINA |
| Food and Nutrition | NUTR |
| Food Science | FDSC |
| French | FREN |
| Geography | GEOG |
| Geology | GEOL |
| Global Studies | GLST |
| Health Studies | HLTH |
| Healthcare Administration | HCAD |


| SUBJECT PR | PREFIX CODE |
| :---: | :---: |
| History | HSTY |
| Hospitality and Tourism | HTMG |
| Management |  |
| Interdisciplinary Studies | INTD |
| Instructional Technology | INST |
| Irish Studies | IRST |
| Liberal Studies | LIBS |
| Linguistics | LING |
| Literacy and Language | LTRC |
| Management | MGMT |
| Marketing | MRKT |
| Mathematics | MATH |
| Museum Studies | MUSE |
| Music | MUSC |
| Neuroscience | NEUR |
| Nursing | NURS |
| Nursing Core | NURC |
| Nursing Case Management | t NURM |
| Nursing Education | NURE |
| Nursing Leadership | NURL |
| Nutrition Education | NUED |
| Nutrition Management | NUTM |
| Organizational Leadership | ORGL |
| Philosophy | PHIL |
| Physical Science | PHSC |
| Physics | PHYS |
| Political Science | POSC |
| Portuguese | PORT |
| Post-Baccalaureate Teacher Licensure | PBTL |
| Pre-Health Professions | HEAL |
| Psychology | PSYC |
| Public Administration | PADM |
| Quantitative Economic Analysis | ysis QUAN |
| RAMS New Student Seminar | r RAMS |
| Russian | RUSS |
| Sales Marketing | SMKT |
| Science Communication | SCOM |
| Science and Technology Studies | dies SCTC |
| Science Education | SCED |
| Sociology | SOCI |
| Spanish | SPAN |
| Special Education | SPED |
| Sports Management | SPMG |
| Sports Marketing | SPMK |
| Statistics | STAT |
| Studio Art | ARTS |
| Teaching English as 2nd Lang | ng TESL |
| Theatre Studies | THEA |
| Washington Center | OCST |

## ACCOUNTING COURSES

## ACCT 220 Introduction to Financial Accounting

A study of financial and accounting systems starting with the accounting cycle and going through the preparation and interpretation of financial statements for all types of business entities. Topics include generally accepted accounting principles, the theory of accounts, and the theory of present value as it relates to financial accounting problems. Credit will not be given for both this course and ACCT 120 Introduction to Financial Accounting.
Prerequisite: Sophomore Standing.

## ACCT 221 Introduction to Managerial Accounting

A study of the fundamentals of how internal accounting reporting facilitates business decision making. This course integrates management theory, product (service) cost analysis, cost systems, cost-volume-profit analysis, incremental analysis, budgeting, performance evaluations, and ethics. Note: Credit will not be given for both this course and ACCT 121 Introduction to Managerial Accounting.
Prerequisite: ACCT 220 Introduction to Financial Accounting.

## ACCT 303 Accounting Information Systems

A study of the procedures used to provide financial information in a timely manner. The course covers the process of conveying financial data for internal reporting to management for planning and controlling future business activities. Accounting information systems combines controls and accounting tools with technology in the decision-making process. Topics include internal control, business processes, data management and integrated production processes as related to accounting processes.
Prerequisite: ACCT 221 Introduction to Managerial Accounting.

## ACCT 321 Intermediate Accounting I

An intensive study of generally accepted accounting principles dealing with balance sheet evaluations and their effect on income determination. Topics include accounting theories and environments, the financial reporting process, and applications of present value techniques to accounting, valuation and reporting of cash, receivables, short-term investments, inventories, fixed assets and intangible assets.
Prerequisite: ACCT 221 Introduction to Managerial Accounting.

## ACCT 322 Intermediate Accounting II

An intensive study of additional topics in financial accounting, including an in-depth analysis of current and long-term liabilities, owners' equity in capital stock, retained earnings and accumulated other comprehensive income, statement of changes in owners' equity and statement of cash flows. Students also study convertible securities, pension accounting, and accounting for lease transactions. Prerequisite: ACCT 321 Intermediate Accounting I.

## ACCT 326 Cost Accounting

A treatment of presentation and analysis of data to facilitate decision-making in the organization. Topics covered include cost evaluation, forecasting, variance analysis, cost structures, cost behavior patterns, break-even analysis, and capital budgeting.
Prerequisite: ACCT 221 Introduction to Managerial Accounting.

## ACCT 428 Taxation

A broad introduction to federal income tax law and preparation. Covered in detail is the taxation of individuals including taxable income determinations, deductions, and gain or loss on exchange of property. The course also introduces taxation issues faced by corporations and partnerships.
Prerequisite: Senior standing. ACCT 220 Introduction to Financial Accounting or permission of the instructor.

## ACCT 429Auditing

A study of auditing concepts, theory, objectives and practices. Topics include generally accepted auditing standards, internal control, various auditing systems, professional ethics, and the legal liabilities of the auditor.
Prerequisites: ACCT 321 Intermediate Accounting I and QUAN 202 Statistical Analysis for Business and Economics.

## ACCT 490 Independent Study in Accounting

An opportunity for a student to pursue reading and research on a selected topic in accounting under the direction of a faculty member.
Prerequisites: Permission of the instructor and department chair.

## ACCT 495 Internship in Accounting

A supervised practical experience in a public or private organization appropriate to the student's program of study. Before registering for the internship, the student must submit a proposal outlining the internship and showing how it integrates with the student's academic program. The internship requires written documentation of the student's experiences and a research project or critical evaluation of the experience. Students may earn up to four (4) course credits. For each course credit, a minimum of 120 hours is required. The internship is not intended to satisfy or substitute for any of the courses required for the major. Prerequisites: A minimum of 3.00 GPA overall and 3.20 in department courses and approval of the faculty internship supervisor. The GPA requirement may be waived at the discretion of the faculty internship supervisor with approval from the department chair.

## AMERICAN SIGN LANGUAGE COURSES

## ASGN 101 Elementary American Sign Language I (Gen. Ed. Domain I-C)

An introduction to language and culture designed to provide beginners with basic American sign language vocabulary and syntax and an appreciation to deaf culture and deaf history. Opportunities to interact with the deaf community are provided. Students give class presentations and complete a research paper by the end of the semester.

## ASGN 102 Elementary American Sign Language II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills and an appreciation of Deaf culture. Students continue to expand vocabulary and concepts acquired in ASGN 121 American Sign Language I. Expansion of conversational range includes talking about other people and activities, giving directions, and making requests. Students develop discourse skills appropriate for establishing connections with deaf acquaintances and handling a variety of interruptions. Through in-class discussions and demonstrations, videotapes, and course readings, students are exposed to elements of Deaf culture and the Deaf Community.
Prerequisite: ASGN 101 American Sign Language I or permission of the instructor.

## ASGN 200 American Sign Language Linguistics

An exploration of the structure of American Sign Language and how the linguistic basis of signed languages contrasts with that of spoken languages. Specifically, signed and spoken languages are contrasted in terms of phonology, morphology, syntax, agreement, reference, and prosody. Other topics include depicting verbs, non-manual marking, language change, language contact, and language acquisition.
Prerequisite: ASGN 102 American Sign Language II or permission of instructor.

## ASGN 201 Intermediate American Sign Language I

A course in which students expand their vocabulary and grammar through dialogues and narratives. Expansion of conversational range includes describing people and things, asking for assistance/advice and making requests, describing places, and giving opinions about others. This course is designed to provide additional training in grammatical structures, which in turn promotes increased conversational skill. Students in the American Sign Language/English Interpreting concentration must pass the course with a minimum grade of B (3.0).
Prerequisite: ASGN 102 American Sign Language II with a minimum grade of B (3.0) or permission of instructor.

## ASGN 202 Intermediate American Sign Language II

A continuation of ASGN 201 Intermediate American Sign Language I. This course provides students with opportunities to expand their vocabulary and grammar through dialogues and narratives. Expansion of conversational range includes making appointments and plans; locating things; discussing life events; and identifying things, hobbies, and interests. It is designed to provide additional training in grammatical structures, which in turn promotes increased conversational skill. Students in the American Sign Language/English Interpreting concentration must pass the course with a minimum grade of $\mathrm{B}(3.0)$.
Prerequisite: ASGN 201 Intermediate American Sign Language I with a minimum grade of B (3.0) or permission of instructor.

ASGN 242 Communication Dynamics in Interpreted Encounters ( 0.5 course-credit)
An exploration of communication dynamics when interpreters are involved in interpersonal encounters. Interpreted interactions are examined in the light of communication theory as well as theories of interpreter participation. In the style of a survey course, students explore relevant aspects of interpersonal communication, small group communication, and intercultural communication research and theory. Some critical social theory is introduced so students can explore the play of power and privilege. An overview of social scientific paradigms provides a frame for comparing and contrasting interpreted interaction with non-interpreted interaction. The course equips students with knowledge and skills to bring to bear in their interpreting practicum experience and when they embark upon a professional career as sign language interpreters. Students in the American Sign Language/English Interpreting concentration must pass this course with a minimum grade of C (2.0). Corequisite: ASGN 321 American Sign Language/English Interpreting I or permission of instructor.

## ASGN 301 Advanced American Sign Language I

Designed to assist students in achieving advanced levels of proficiency in receptive and expressive skills. Students practice discourse strategies for the delivery of narratives, instructions, and explanations. Attention is given to the use of classifiers/depicting verbs, conditional sentences, rhetorical questions, and relative clauses. Students in the American Sign Language/English Interpreting concentration must pass the course with a minimum grade of B (3.00).
Prerequisite: ASGN 202 Intermediate American Sign Language II with a minimum grade of B (3.00); or permission of instructor.

## ASGN 302 Advanced American Sign Language II

Designed to assist students in achieving advanced levels of proficiency in receptive and expressive skills. Attention is given to vocabulary and forms of expression in specific domains, such as finances and health. Students practice discourse strategies for the communication of decisions, reporting of information, and requests for clarification. Elements of storytelling are explored. Students in the American Sign Language/English Interpreting concentration must pass the course with a minimum grade of B (3.0).
Prerequisite: ASGN 301 Advanced American Sign Language I with a minimum grade of B (3.0) or permission of instructor.

## ASGN 321 American Sign Language/English Interpreting I

Designed to develop the cognitive and analytical skills required in interpreting (listening for meaning, recall, prediction, closure); paraphrasing and restructuring practice; written, spoken, and signed translation; practice in shifting linguistic register; expansion of English vocabulary; and theoretical models of the interpreting process.
Prerequisites: ASGN 202 Intermediate American Sign Language II with a minimum grade of B (3.00) and DFST 201 Introduction to the Interpreting Profession with a minimum grade of C (2.00); or permission of instructor.

## ASGN 322 American Sign Language/English Interpreting II

A practical study of simultaneous interpreting dialogue in a variety of settings. These different settings require that students develop habits of research and preparation prior to the interpreting tasks. Skills practice is supplemented by a review of theories of interpreting and of interpersonal communication and their application to interpreted encounters. Students begin working in pairs to manage the more challenging nature of the settings and topics they must interpret.
Prerequisite: ASGN 321 American Sign Language/English Interpreting I.

## ASGN 330 Reading and Analysis of Research in Interpreting ( 0.5 course-credit)

An orientation to peer-reviewed research in the field of interpreting and in related fields such as linguistics and communication. Students learn how to read research articles in order to understand the components of the research process and to be able to engage in a critical review of published research. Students also consider how findings from research are applied to professional practice. Skills developed include an ability to analyze and critique research methodology, data, and conclusions.
Corequisites: ASGN 321 American Sign Language/English Interpreting I and ASGN 242 Communication Dynamics in Interpreted Encounters; or permission of instructor.

## ASGN 333 Ethical Decision-Making in the Interpreting Profession ( 0.5 course-credit)

An exploration of the foundations of personal moral reasoning and their application to the profession of interpreting. Students engage in activities and discussion that lead them to an understanding of their background beliefs, how these beliefs carry over into moral character, and how beliefs and character interface with professional ethics and cross-cultural competence to arrive at ethical decision-making. Models of ethical decision-making in the interpreting profession are reviewed as well as emerging research and expectations/trends/practices that relate to ethical reasoning and conduct. Note: Students in the American Sign Language/English Interpreting concentration must pass this course with a minimum grade of $\mathrm{C}(2.0)$.
Prerequisite: ASGN 321 American Sign Language/English Interpreting I with a minimum grade of C (2.0); or permission of instructor.

## ASGN 340 Undergraduate Research in Interpreting ( 0.5 course-credit)

Designed to give students experience in conducting or participating in original research related to the fields of interpreting, linguistics, or communication under the supervision of program faculty. Skills developed include an ability to design or contribute to sound research methodology, gather and interpret data, and determine significance of findings. Students submit a research report that conforms to accepted standards of writing for undergraduate level research.
Prerequisite: Completion of ASGN 330 Reading and Analysis of Research in Interpreting with a minimum grade of $\mathrm{C}(2.00)$.

## ASGN 401 Advanced American Sign Language III

Designed to help students achieve superior levels of proficiency in expressive and receptive skills. Students gain practice in using advanced features of grammar, prosody and classifiers, as well as the vocabulary used in academic, professional, political and abstract discourse. Students learn to present on complex or abstract topics requiring lengthy, connected and detailed discourse. Exposure to a variety of American Sign Language users presenting on a range of topics and registers expands students' receptive skills.
Prerequisite: ASGN 302 Advanced American Sign Language II or equivalent skills as determined through assessment.

## ASGN 402 Advanced American Sign Language IV

A continuation of ASGN 401 Advanced American Sign Language III. It is designed to help students achieve a professional level of proficiency in expressive and receptive skills.
Prerequisite: ASGN 401 Advanced American Sign Language III.

## ASGN 413 American Sign Language/English Interpreting III

A continuation of ASGN 322 American Sign Language: English Interpreting II. Students further their abilities in consecutive and simultaneous interpreting of expository, procedural and academic discourse. Students continue to experience the dynamics of teamed assignments to practice and to consider environmental logistics.
Prerequisites: ASGN 322 American Sign Language/English Interpreting II.

## ASGN 414 American Sign Language/English Interpreting IV

A practical study of the skills and settings appropriate for entry-level professional work. Students practice for settings including K-12 classrooms, interpretation for DeafBlind individuals, tandem work with Deaf interpreters, and sight translation of written documents.
Prerequisite: ASGN 413 American Sign Language/English Interpreting III.

## ASGN 451 Interpreting Practicum and Seminar I

A senior year practicum with an assigned practicum supervisor. Emphasis is on the Demand-Control Schema and professional ethics as a framework for observations and interpretations. Students must complete 150 hours at their practicum site in one semester, averaging two days per week. The practicum experience is augmented by a weekly seminar in which the interpreter's role and responsibilities, ethical standards, and models of interpreting are discussed. Issues of self-care and other relevant topics are addressed.
Prerequisite: ASGN 413 American Sign Language/English Interpreting III (may be taken concurrently).

## ASGN 452 Interpreting Practicum and Seminar II

A practicum in which students continue to observe and provide interpreting under the supervision of professional interpreters. Students must complete 150 hours at their practicum site in one semester, averaging two days per week. The practicum experience is augmented by a weekly seminar. In addition to ethics and professional standards, the seminar addresses steps toward state and national credentialing, as well as business practices and continuing professional development.
Prerequisites: ASGN 414 American Sign Language/English Interpreting IV (may be taken concurrently) and ASGN 451 American Sign Language English Interpreting Practicum and Seminar I with a minimum grade of $\mathrm{C}(2.00)$.

## ASGN 490 Independent Study in American Sign Language

An in-depth investigation of an American Sign Language topic in the areas of literature, culture, linguistics, or interpreting, selected by the student under the guidance of a member of the World Languages Department. Regular meetings with the faculty advisor are to be arranged. A written report is required. Note: Limited to juniors and seniors.
Prerequisite: Permission of Department Chair.

## AMERICAN STUDIES COURSES

## AMST 490 Independent Study in American Studies

An opportunity for the student minoring in American Studies to combine the knowledge and methodology of various disciplines in one project. Open only to students minoring in American Studies who have completed at least four (4) courses acceptable for the minor. Prerequisite: Permission of the chairs of English and History Departments required.

## ANTHROPOLOGY COURSES

## ANTH 161 Cultural Anthropology (Gen. Ed. Domain III-B)

An exploration of how culture influences us to believe, think, and act. The course presents crosscultural perspectives on aspects of human life, which may include how we get the things we need to survive, what sort of family life is desirable, and how we govern ourselves and maintain social order. Both Western and non-Western ideas and practices are explored. Students are introduced to the methods used by anthropologists in the study of culture.

## ANTH 172 Interpreting the Past: Archaeological Perspectives (Gen. Ed. Domain III-A)

An exploration of past Western and non-Western social worlds through the examination of their material remains. The course investigates past beliefs and practices, including those involving treatment of the dead, power and prestige, art, architecture, and gender. Students learn how archaeologists use techniques such as excavation, survey, and interpretation to study past behavior.

## ANTH 203 Human Origins (Gen. Ed. Domain III-A)

An exploration of the archaeological and biological evidence for the origin and evolution of humans. The story of human origins is constantly evolving with recent developments in DNA analysis and archaeological finds. Students learn about the spread of Homo sapiens across the continents from Africa, as well as our relationship to other early humans, including those that exist still in our DNA - such as the Neanderthals. In addition, students address the question of whether human races really exist. The course introduces students to paleoanthropology.

ANTH 206 Forensic Anthropology (Gen. Ed. Domain III-A)
An introduction to the field of forensic anthropology. Forensic anthropologists solve problems related to cause of death and help establish personal identity from human skeletal remains and other evidence, especially in cases of medical and legal importance. Students learn about the relevant techniques and theories from archaeology, biological anthropology, skeletal biology, and related disciplines. Cases covered may include the historical and/or ancient (for example, sacrificial death in ancient Peru) and the contemporary (for example, the excavation of mass graves and other evidence of human rights violations).

## ANTH 207 Global Issues in Anthropology (Gen. Ed. Domain III-C)

An anthropological analysis of the interconnections among issues such as the culture of capitalism, the global economy, global inequality, warfare and violence, hunger and starvation, human trafficking and the drug trade, and the unequal effects of climate change. Perspectives on paths to addressing global problems are also discussed.

## ANTH 231 Great Discoveries in Global Archaeology (Gen. Ed. Domain III-A)

An exploration of archaeological discoveries of global importance that have shaped our understanding of past societies and how change occurs. Students examine cultural innovations and their impact on the course of history. Topics may include the origins of technology in Africa; the advent of agriculture; cave art and the emergence of creativity; the construction of Stonehenge and the Pyramids; and the mapping of the Neanderthal genome. Students explore the colonial, Eurocentric context of many of these discoveries, as well as their impact on contemporary communities.

ANTH 243 Indigenous Cultures of North America (Gen. Ed. Domain III-B)
An exploration of the contemporary and historical lifeways of indigenous North American peoples from an anthropological perspective. Issues of gender, class, and race, as they affect indigenous peoples, are an important focus of this course.

## ANTH 253 Gender Across Cultures (Gen. Ed. Domain III-B)

An investigation of how gender is thought of and practiced in various locations across the globe. The course addresses questions such as the following: How do we learn our gender? How do ideas of gender expression differ depending upon culture, race/ethnicity, and social class?

## ANTH 258 Men and Masculinities (Gen. Ed. Domain III-B)

An examination of the cultural forces that drive people to assume particular masculine identities, with a strong emphasis on cross-cultural interpretations. Students also examine the social and cultural forces that shape a person's experience of masculinity including race/ethnicity, social class, sexual identity, and ideas about gender. The course also addresses contemporary issues related to masculinities.

## ANTH 290 Non-Western Cultural Studies Tour (Gen. Ed. Domain III-C)

Taught through an extensive field trip or series of field trips, combined with more traditional methods of teaching, Students gain direct experience of a non-western culture or cultures through first-hand, intensive exposure to aspects of the culture of a particular area. The cultures and locations may vary from year to year, and are announced in the course schedule for a given semester. Students prepare in advance for their field excursions through assigned readings and discussion meetings with the instructor, and are evaluated on their learning experience. This course may be repeated for credit through travel to an alternate site.

## ANTH 301 Anthropological Theory

An exploration of major theories and debates from the beginning of anthropology as a discipline through the present. Students learn to evaluate the different schools of thought in terms of how well each explains certain aspects of human culture, as well as how the broader social, political, and historical context has shaped the questions asked by anthropologists and the conclusions drawn. Students also explore significant controversies within the discipline today.
Prerequisites: Sophomore status; ANTH 161 Cultural Anthropology or ANTH 172 Interpreting the Past: Archaeological Perspectives.

## ANTH 313 South American Archaeology

An exploration of the archaeology of South America. The course follows key debates in South American archaeology, including early peopling, ecological adaptation, the origins of "civilization," empires, and practices such as head-hunting, sacrifice, and ritual. Cultures and areas studied may include Monte Verde, the Inca, Moche, and the ancient Amazon. Students learn to think critically and archaeologically about such issues and cultures.
Prerequisite: ANTH 161 Cultural Anthropology or ANTH 172 Interpreting the Past: Archaeological Perspectives; or permission of the instructor.

## ANTH 360 Language and Culture

An examination of language and culture from an anthropological perspective. The course investigates how language shapes our perceptions, and how language is controlled by powerful groups, such as politicians and the media, to influence our ideas and behaviors. It poses the question: Why do women and men, members of different racial/ethnic groups, and people of different social classes speak the same language differently?
Prerequisite: ANTH 161 Cultural Anthropology or permission of instructor.

## ANTH 391 In the Field: Research Methods in Anthropology

An opportunity for students to engage in hands-on research that investigates human culture. Research in anthropology is primarily qualitative and is grounded in ethnographic or archaeological fieldwork. Students read and evaluate ethnographic reports and then engage in a research project of their own. Required fieldwork may involve travel to a site where the student stays for an extended period of time, or it may involve a local site that the student visits repeatedly for short periods of time.
Prerequisites: Junior status; ANTH 301 Anthropological Theory.

## ANTH 490 Independent Study in Anthropology

An in-depth investigation in a specific topic relating to the student's interest in anthropology. The selection is made by the student with written approval of the faculty advisor. Oral presentation and final written report required.
Prerequisite: Junior status; a 100- level course in Sociology or Anthropology; permission of instructor.

## ANTH 495 Internship in Anthropology

A first-hand exploration of careers related to anthropology through the prism of an internship chosen by the student in either a nonprofit, for-profit, or government organization. Students are expected to work at their internship site for a total of 120 hours per semester and to take notes about what they are observing on the job. In class, students discuss readings in order to make sense of their observations and to develop a term paper about some aspect of their internship site. Note: Students may earn up to two (2) internship course-credits, which may be taken during two (2) separate semesters, as long as the content of the experience is substantially different.
Prerequisites: Junior status; two (2) Anthropology courses, one of which must be at the 200 level or above; and permission of instructor.

## APPLIED STATISTICS COURSES

## STAA 127 Statistics for Social Sciences (Gen. Ed. Domain II-A)

An introduction to descriptive and inferential statistics used in the social sciences. The logic, assumptions, computation, and interpretation of inferential statistics are covered. Topics include: measures of central tendency, and variability; the normal distribution, correlation, chi-square test of independence; one-sample and independent-samples t-tests; one-way and two-way Analysis of Variance (ANOVA). Note: Students may not receive credit for both this course and STAT 107 Business Statistics or STAT 117 Introduction to Statistics or STAT 157 Probability and Statistics or STAT 203 Statistics for the Natural Sciences.
Prerequisite: Eligibility to enroll in a 100 -level mathematics course without Lab Emporium.

## ART HISTORY COURSES

## ARTH 160 Introduction to the World of Art (Gen. Ed. Domain I-B)

An introductory course designed for students with little or no background in art. The course uses a variety of teaching methods to introduce the principles of visual arts and the role that the arts play in human culture. This course does not satisfy the requirements for the Art History or Studio Art majors.

## ARTH 200 Art and Social Values (Gen. Ed. Domain III-C)

An exploration of art as it reflects, reinforces, and challenges society's values. The course may focus on art from different cultures and historical periods or have a special focus on one culture or time period. Students examine works of art in terms of both form and content, especially content related to political expression, power relations, and representations of race/ethnicity and/or social class, and/or gender.

## ARTH 222 Sex, Drugs, and Suicides: The Artist in Popular Culture (Gen. Ed. Domain

 I-B)An examination of the representation of artists and their art works in popular culture from the Renaissance to the present. Stereotypes include the starving artist, the sexually promiscuous artist, the chemically dependent artist, and the suicidal artist. By studying the selected artists' works, biography, writings, and historical information, in addition to the representation primarily in films, but also in other sources like graphic novels, games, or toys, students discuss the myths and try to separate fact from fiction. Class lecture and discussion augment readings and films.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ARTH 226 History of Photography (Gen. Ed. Domain I-B)

An investigation of the history and development of photography from its beginnings in the early nineteenth century to the present. Throughout the course, the use of photography for aesthetic and documentary purposes is examined and the influence of art and culture on the practice and interpretation of photography is explored. Students investigate photography of various time periods using textbook illustrations, in-class images, videos, and museum exhibitions. Class lecture, discussion, and group projects augment the text and other readings. Note: Students cannot receive credit for both this course and COMM 210 History of Photography.

## ARTH 270 History of Art I (Gen. Ed. Domain III-A)

A study of the arts of Europe, the Near East, Asia, and pre-Columbian America from prehistory through the medieval period. Attention is given to the essential role of art in the religions and cultures of the world as well as on formal and aesthetic issues. Assignments and examinations encourage students to think and write critically about art. Note: Students who have taken 11.271 History of Western Art I will not receive credit for ARTH 270 History of Art I.

## ARTH 272 History of Art II (Gen. Ed. Domain III-A)

Study of the arts in Western and non-Western societies from the Renaissance through the 19th Century. The relationships between art, politics, and social identity as well as formal and aesthetic issues are explored as students develop their ability to think and write critically about art. Note: ARTH 270 History of Art I is not a prerequisite for ARTH 272 History of Art II.

## ARTH 273 Modern Art History (Gen. Ed. Domain I-B)

A survey of major artists and art movements from Post-Impressionism through Abstract Expressionism ( 1880 's-1950's). Issues and events of the late nineteenth century to mid-twentieth century, such as rapidly expanding technology, world wars, utopian movements, and issues of race, class, and gender are explored in relationship to avant-garde art movements.

## ARTH 282 American Art (Gen. Ed. Domain I-B)

A study of the art and architecture of the United States from Colonial times through the early 20th Century. Attention is given to Native American art and the work of folk artists/craftspersons as well as that of artists nurtured in European traditions. Readings and class discussion focus on the arts as a unique expression of the American experience in relationship to history, politics, ideology, and social and technological changes.

## ARTH 285 The Art of Asia (Gen. Ed. Domain III-C)

A contextual study of the arts of India, China, Japan, and Southeast Asia, spanning the ancient to post-modern worlds. The course explores major movements and schools of art, such as Buddhist sculpture, Chinese landscape painting, and Japanese prints. Readings and discussions focus on the interrelationships among art and religion, identity, and political authority. The course includes study of Western influences in Asia, and of the idea of the "Orient" in Western culture.

## ARTH 288 Latin American Art (Gen. Ed. Domain III-C)

A study of PreHispanic, Colonial, and Modern Latin American visual culture. Emphasis is placed on social context and politics of art, including issues of race, gender, and social class. Students write a research paper and make an oral presentation to the class.

## ARTH 290 Study Tour: Art \& Architecture (Gen. Ed. Domain I-B)

An art history course taught through an extensive field trip or series of field trips, in addition to more traditional methods of teaching. Students gain direct experience of art and architecture in historic, social, and geographic contexts. The topics/locations may vary from year to year and are announced in the course schedule bulletin. This course, in a different topic/location, may be repeated for credit. Location to be announced when offered.

## ARTH 333 History of Graphic Design

An investigation of the history and development of graphic design from the 1500 s to the present, concentrating, mostly, on modern and contemporary design in posters, advertisements, books, magazines, television, and film. The course explores how art and culture have directly influenced many of the trends in graphic design. The art of various time periods is examined through textbook illustrations, digital images, and museum exhibitions. Class lecture, discussion, and group projects augment the text and other readings.
Prerequisite: ARTH 273 Modern Art History or permission of instructor.

## ARTH 365 Contemporary African-American Art History

An introduction to the importance of artworks created by African-American artists during the period from the Harlem Renaissance to the twenty-first century. In examining the artworks themselves, students learn about topics of form, style, and narrative. In addition, the course introduces the lives and careers of 40 individual artists, including their contributions to American culture, history and politics. Topics of discussion include questions of identity, race, class, ethnicity, representation, sexuality, and aesthetics. Students learn about art-historical knowledge on the important aspect of African-American history while developing skills in seeing and writing about visual materials.
Prerequisite course: ARTH 272 History of Art II or permission of the instructor.

## ARTH 383 Contemporary Art History

A study of artistic developments, primarily in Europe and the United States in the contemporary era (1945 to the present), and the development of postmodernism. Consideration is given to the diversity of artistic expressions in this period within their cultural, theoretical, and political contexts. Particular attention is given to the impact on art of such late $20^{\text {th }}$ century phenomena as feminism, identity politics, multiculturalism, environmental awareness, the AIDS epidemic, and the explosion of media and technology, and the ways in which these contributing factors have helped to spawn new artistic media e.g. earth art, installation, video, performance and Web-based art.
Prerequisite: ARTH 273 Modern Art History.

## ARTH 389 Special Topics in Art History

A study of a special period or topic in art history. Specific topics are announced in the course schedule bulletin. The course explores the art in terms of its formal elements, iconography, and social context through extensive readings, lectures, writing, and discussion. Students write a research paper. This course, on a different topic, may be repeated for credit.
Prerequisite: One art history course or permission of instructor.

## ARTH 483 Seminar in the History of Art

An intensive investigation into one particular period or theme in Art History. Extensive readings and discussions address current theoretical and methodological issues. The course is intended to give junior and senior level students the opportunity to conduct in-depth research, write a scholarly paper, and present their research and findings in a professional manner. This seminar, if taught on a different topic, can be repeated for credit. NOTE: No transfer course can fulfill this seminar requirement for Art History majors.
Prerequisites: ARTH 270 History of Art I and ARTH 272 History of Art II; or permission of the instructor.

## ARTH 490 Independent Study in Art History

An Art major or minor with demonstrated ability may pursue a project or subject area of their own interest, under the guidance of a member of the Art Department faculty. The student must submit a written proposal to the faculty member who has agreed to be the advisor. A student may take more than one independent study. Limited to juniors and seniors.

## ARTH 495 Internship in Art History

A supervised experience in a field study situation which complements the student's course work. The internship program is offered through cooperation of participating institutions which provide professional guidance for the interns. Any student who wishes to participate in the internship must consult with the Art Department Internship Coordinator not later than the middle of the semester prior to beginning of the internship.
Prerequisite: Junior and senior art majors who have a GPA of no less than 2.50 in their major.

## ART THEORY COURSES

## ARTT 395 Art Theory and Criticism

An exploration of art theory and criticism as they relate to the current discourse surrounding the interpretation and production of visual art. The course investigates the critical theory, visual culture, and cultural revolutions of the last half-century that shape the art of today. It charts the relationship between art making, art history, art criticism, and the art world (the social and economic systems and means through which an object or action becomes "art"). It focuses on major concepts from latemodernity to the contemporary, exploring various lenses of interpretation from psychoanalysis, Marxism, structuralism, post-structuralism, feminism, identity politics and queer theory.
Prerequisites: ARTH 383 Contemporary Art History, or permission of the instructor.

## ASTRONOMY COURSES

## ASTR 128 Solar System Astronomy (Gen. Ed. Domain II-B)

An overview of what we know about the solar system: how it formed and evolved, its components and their properties, and how these elements interact as a system. Topics include celestial motions and gravity; the Earth-Moon-Sun system and the astronomical origins of calendrical and time systems; characteristics of the planets, natural satellites, ring systems, and small solar system bodies; exoplanets and their discovery mechanisms; and the history of and continuing search for extraterrestrial life. Lectures are supplemented by selected readings, planetarium presentations, and telescopic observations. Note: Credit is given for this course only if taken before ASTR 218 Principles of Solar System Astronomy. Students intending to major or minor in Earth System Science should take ASTR 218 Principles of Solar System Astronomy instead of this course.
Prerequisite: Eligibility to enroll in college level math without corequisite remediation, or permission of the instructor.

ASTR 130 Search for Life in the Universe (Gen. Ed. Domain II-B)
An introduction to astrobiology, the study of the nature, existence, and search for extraterrestrial life. Students investigate the physical and chemical conditions necessary for life as we know it, along with the origin and evolution of life on earth. Students also explore the possibilities of life existing elsewhere in our solar system, either currently or at some point in the past. The course addresses the hunt for planets outside our solar system, and the search for intelligent life in our universe.
Prerequisite: Eligibility to enroll in college level math without recitation or permission of the instructor.

## ASTR 218 Principles of Solar System Astronomy

An expansive and quantitative examination of what we know about the Solar System: how it formed and evolved, its components and their properties, and how these elements interact as a system. Topics include celestial motions and gravity; the Earth-Moon-Sun system and the astronomical origins of calendrical and time systems; radiometric chronology and the constraints it places on timing and rate of planetary accretion; characteristics of the planets, natural satellites, ring systems, and small solar system bodies; exoplanets and their discovery mechanisms; and the history of and continuing search for extra-terrestrial life. Lectures are supplemented by selected readings, planetarium presentations, and telescopic observations. This is an advanced introductory course designed for students majoring or minoring in Earth System Science and includes extensive quantitative analysis, readings, and selfdirected telescopic observations. Note: Students may not receive credit for ASTR 120 Solar System Astronomy after receiving credit for ASTR 218 Principles of Solar System Astronomy.
Prerequisite: MATH 123 Introduction to Functions or a satisfactory score on the mathematics placement examination.

## ASTR 230 Stars and Galaxies (Gen. Ed. Domain II-B)

An introduction to astronomy beyond the Solar System. Topics include the birth and death of stars, black holes, the structure of the Milky Way Galaxy, galactic evolution, the Big Bang, the possible fate of our universe, and the possibilities of life in the universe. Lectures are supplemented by selected readings, planetarium presentations, and telescopic observations.
Prerequisite: MATH 123 Introduction to Functions or permission of instructor.

## BIOLOGY COURSES

## BIOL 101/101L Biological Concepts with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

An approach to the study of biology that emphasizes conceptual understanding of biological systems. These areas include evolution and the origin of life, cellular processes, Mendelian and molecular genetics, ecology, behavioral science, and basic physiological systems. The interrelationship of these areas and their effect on human biology are stressed. Students are required to enroll in the corresponding laboratory. Laboratory ( $\mathbf{3}$ hours). This course is not open to Biology majors. Note: This course is required for students in the Coordinate Major in Elementary Education and recommended for students in the Coordinate Major in Early Childhood Education.
Corequisite: BIOL 101L Biological Concepts Lab.
Prerequisite: Completion of the Common Core Mathematics requirement.
BIOL 103 Biological Perspectives on Environmental Issues (Gen. Ed. Domain II-B)
An introduction to the scientific principles on which environmental decisions should be based. Methods of biological conservation practice are stressed. The course includes a discussion of the development and future of the conservation movement. Occasional field trips. No laboratory. This course is not open to Biology majors. Note: Students may not receive credit for both this course and BIOL 103 Ecological Implications of Conservation. No laboratory. This course is not open to Biology majors.

## BIOL 109/109L Introduction to Biological Science with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

An introduction to the fundamental concepts of biological science. Topics include structures and processes from molecules to organisms, inheritance and variation of traits, ecosystem interactions, energy and dynamics, and biological evolution. Emphasis is placed on scientific interpretation as well as content. Laboratory ( 3 hours).
Note: This course is not open to science or coordinate education majors.
Corequisite: BIOL 109L Introduction to Biological Science Lab.
Prerequisite: The eligibility to enroll in college level math without co-requisite remediation.

## BIOL 114 A Human Perspective on Genetics (Gen. Ed. Domain II-B)

An exploration of the field of genetics from the rediscovery of Mendel's work in 1900 up to the present, with an emphasis on human involvement and ramifications. Topics may include: the human genome project, genetic disorders, cloning, genetically modified crops and animals, prenatal and postnatal genetic screening and mass production of pharmaceuticals. This course is not open to Biology majors.

## BIOL 125 The Biology Experience

An immersion into the field of biology and all of its opportunities for students. In this engaging, collaborative introduction, students learn about the breadth of biology and the roles of biologists in society. Students participate in discussions and activities to explore the diverse fields of biology. In addition to collecting, analyzing, and interpreting data, students learn about the importance of communication with both the general public and other scientists. NOTE: This course is only open to Biology majors.

## BIOL 130/130L Principles of Biology with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

An introduction to the principles and methods of biological science that serve as a foundation for students, in majors other than Biology, intending to take additional biology courses. The course focuses on the following topics: ecology, evolution, biological diversity, biochemistry and cellular processes, genetics, and physiology. Laboratory ( 3 hours). NOTE: This course is only open to majors in the departments of Chemistry \& Food Science, Computer Science, Environment, Society, \& Sustainability, and Food \& Nutrition.
Corequisite: BIOL 130L Principles of Biology Lab.
Prerequisite: The eligibility to enroll in college level math without co-requisite remediation.

## BIOL 135/135L Foundations of Biological Science with Lab

(1.25 Course-credits)

An introduction to the fundamental content and concepts of biology within an evolutionary framework. This course serves as a foundation for the field of biology. Topics include structure and function; information flow, exchange and storage; pathways and transformation of energy; species diversity; and the interactions among organisms and their environment. In laboratory ( 3 hours), students explore the process of scientific investigation using activities that may include modeling, simulation and quantitative reasoning.
Corequisite: BIOL 135L Foundations of Biological Science Lab.
Prerequisites: BIOL 125 The Biology Experience and CHEM 107/107L Principles of Chemistry with Lab (may be taken concurrently), or permission of the instructor.

## BIOL 142/142L Introduction to Human Biology with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

An exploration of the functional aspects of the human body at the molecular, cellular, organ, and systems levels. Emphasis is on the development and evolution of homeostatic mechanisms that allow the body to respond and adapt to physical and emotional stresses under changing environmental conditions. Laboratory ( $\mathbf{3}$ hours). Note: This course is not open to Biology or Food and Nutrition majors, except for students in the Nutrition \& Food Service Program Management concentration. Corequisite: BIOL 142L Introduction to Human Biology Lab
Prerequisite: The eligibility to enroll in college level math without co-requisite remediation.

## BIOL 203 Plants and Society (Gen. Ed. Domain II-B)

An exploration of the dependency of humans on plants and plant products. The beginning of agriculture and its consequences for human evolution are discussed. The origins, dispersals, improvements, and uses of economically valuable plants are considered along with their relationships to the world's economy. Occasional field trips. No laboratory. NOTE: This course is acceptable for majors as a biology elective, but not in place of a required plant course.

## BIOL 208/208L Genetics with Lab

(1.25 Course-credits)

A study of the principles governing heredity in all living things, including microorganisms, plants, and animals. Topics covered include Mendelian inheritance, molecular genetics, cytogenetics, human hereditary disease, and population genetics. Laboratory ( $\mathbf{3}$ hours).
Corequisite: BIOL 208L Genetics Lab.
Prerequisite: A college-level introductory biology course with lab, a college-level introductory chemistry course with lab and MATH 123 College Algebra, all with a grade of C- or higher; or permission of the instructor.

## BIOL 212/212L Wildlife Specimen Preparation Techniques with Lab

(1.25 Course-credits)

An introduction to the techniques of wildlife specimen collection and preparation applicable to research, museum, and education specimens. Students practice preservation techniques for wildlife skins and skeletons while, at the same time, learning external, muscular, and skeletal anatomy of a diversity of animals. All specimens are salvaged, i.e. died of other causes; students discuss the regulatory application and reporting procedures for wildlife salvage. This course may be taken a second time in order for the student to practice advanced preservation techniques. Laboratory (3 hours).
Corequisite: BIOL 212L Wildlife Specimen Preparation Techniques Lab.
Prerequisite: A college-level biology course with laboratory; or permission of instructor.

## BIOL 218/218L Introduction to Bioinformatics with Lab

(1.25 Course-credits)

Designed to introduce the principles and prac $\square$ tical approaches of bioinformatics and to enable students to solve biological problems with computational tools in real life. The learning experience features an integration of lectures, hands-on exercises, and group research projects. This course covers learning and research resources in bioinformatics and genomics, advances in sequencing technologies, subsequent analytic tools, structural informatics, phylogenetics, and comparative genomics. Students are required to enroll in the corresponding laboratory ( 3 hours).
Corequesite: BIOL 218L2 Introduction to Bioinformatics Lab.
Prerequisite: A college level biology course with lab, or ENVS 202 Data Analysis for Scientists, or STAT 157 Probability and Statistics, or STAA 127 Statistics for the Social Sciences, or CSCI 156 Python Programming for Applications, or permission of the instructor.

## BIOL 228/228L Microbiology with Lab

(1.25 Course-credits)

An introduction to the basic principles of microbiology, emphasizing microbial systems and their impact on the biosphere and human life. The course focuses on evolution, energy pathways and transformation, information flow, and structure-function of microbial organisms. Special attention is given to bacteria, viruses, and biotechnology. Laboratory ( 3 hours) exercises introduce students to standard techniques of cultivation and identification of microorganisms, and practices unique to microbiology laboratories.
Corequisite: BIOL 228L Microbiology Lab.
Prerequisite: A college-level introductory biology course with lab, a college-level introductory chemistry course with lab and MATH 123 College Algebra, all with a grade of C- or higher; or permission of the instructor.

## BIOL 230 Professional Communication in Biology

Designed to help students develop and practice appropriate communication skills in biology. Students learn to locate, read, critically evaluate, and cite peer-reviewed biological research articles. Students practice writing skills important to biologists including the reporting of biological research through written manuscripts, poster displays, and/or oral presentations, and preparation of resumes and cover letters. Other forms of communication for the scientific and/or lay audience may also be included. Note: This course is open only to biology majors and minors.
Prerequisites: ENWR 110 Composition II and a college-level introductory biology course with lab; or permission of the instructor.

## BIOL 232/232L Invertebrate Zoology with Lab

(1.25 Course-credits)

A comparative study of the invertebrate animal phyla with emphasis on marine forms. The course stresses functional morphology, development, behavior, and ecological and evolutionary relationships among the various groups. Students study live specimens whenever possible. Laboratory ( $\mathbf{3}$ hours) exercises include field trips to collect and study invertebrates of the region.
Corequisite: BIOL 232L Invertebrate Zoology Lab.
Prerequisite: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; or permission of the instructor.

BIOL 233/233L Comparative Vertebrate Anatomy with Lab (1.25 Course-credits)
An introduction to the evolution of vertebrate anatomy. The course is a survey of the anatomical designs of living and extinct vertebrates, emphasizing the anatomical adaptions of vertebrate organs and organ systems in primitive chordates, fishes, reptiles, and mammals. Laboratories are primarily dissection based. Laboratory ( $\mathbf{3}$ hours).
Corequisite: BIOL 233L Comparative Vertebrate Anatomy Lab
Prerequisites: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; and one (1) other science laboratory course; or permission of the instructor.

BIOL 235/235L Principles of Human Physiology with Lab
(1.25 Course-credits)

An overview of the functional anatomy of the human body and its physiology. Basic concepts concerning the skeletal, muscular, nervous, respiratory, cardiovascular, digestive, urinary, endocrine, and reproductive systems are studied. Laboratory (3 hours). Note: Students may receive credit for only one (1) of the following courses: BIOL 344 Animal Physiological Ecology, BIOL 235 Principles of Human Physiology, or BIOL 242 Human Anatomy and Physiology II.
Corequisite: BIOL 235L Principles of Human Physiology Lab.
Prerequisite: A college-level introductory biology course with lab, a college-level introductory chemistry course with lab and MATH 123 College Algebra, all with a grade of C- or higher; or permission of the instructor.

## BIOL 236/236L Ornithology with Lab

(1.25 Course-credits)

An introduction to the biology of birds, including anatomy, physiology, behavior, ecology, field identification, and conservation. Students become familiar with the techniques and tools necessary to identify bird species by sight and/or sound, as well as with basic research techniques. Laboratory ( $\mathbf{3}$ hours) includes field trips. Note: Students may not receive credit for both this course and BIOL 336/336L Ornithology with Lab.
Corequisite: BIOL 236L Ornithology Lab.
Prerequisite: A biology or zoology course at the 100 -level or permission of the instructor.
BIOL 241/241L Human Anatomy and Physiology I with Lab (1.25 Course-credits) A study of the functional systems in the human body and the maintenance of homeostasis. Systems covered in this course include integumentary, bone, joints, muscle, and the nervous system. Laboratory ( $\mathbf{3}$ hours). Course offered Fall semester. Note: Students may not receive credit for both this course and BIOL 235/235L Principles of Human Physiology with Lab or BIOL 273 Human Anatomy \& Physiology: Musculoskeletal \& Control Systems.
Corequisite: BIOL 241L Human Anatomy and Physiology I Lab.
Prerequisite: A college-level introductory biology course with lab, a college-level introductory chemistry course with lab and MATH 123 College Algebra, all with a grade of C- or higher; or permission of the instructor.

BIOL 242/242L Human Anatomy and Physiology II with Lab (1.25 Course-credits) A continuation of BIOL 241 Human Anatomy \& Physiology I. This course focuses on system physiology, with particular emphasis on the cardiovascular, respiratory, immune, endocrine, reproductive, urinary and digestive systems. Course offered Spring semester. Laboratory ( $\mathbf{3}$ hours). Note: Students cannot receive credit for both this course and BIOL 272 Human Anatomy \& Physiology: Cellular \& Organ Systems.
Corequisite: BIOL 242L Human Anatomy \& Physiology II.
Prerequisite: BIOL 241/241L Human Anatomy and Physiology I with Lab or permission of instructor.

## BIOL 248/248L Principles of Ecology with Lab

(1.25 Course-credits)

An introductory course that emphasizes the interactions between the organism and its biological and physical environments. Concepts covered include soil, climate, trophic systems, life history tradeoffs, behavioral ecology, biodiversity, and human impacts. Laboratory ( $\mathbf{3}$ hours) includes field trips. Note: Students may not receive credit for both this course and BIOL 348 Ecology.
Corequisite: BIOL 248L Ecology Lab.
Prerequisites: A chemistry course with laboratory, MATH 123 Introduction to Functions and one (1) of the following: BIOL 101/101L Biological Concepts with Lab, BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; or permission of the instructor.

BIOL 251/251L Vascular Plant Taxonomy with Lab
(1.25 Course-credits)

An historical view of plant classification; concepts of nomenclature, goals of phylogenetic and biosystematic investigations; anatomical and morphological characteristics important in classification; key characteristics of important temperate plant families; collection and identification techniques; and introduction to the local flora. Laboratory ( $\mathbf{3}$ hours).
Corequisite: BIOL 251L Vascular Plant Taxonomy Lab
Prerequisite: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab.

## BIOL 255/255L Plant Physiology with Lab

(1.25 Course-credits)

An introduction to basic processes that regulate plant growth and development. Photosynthesis, photomorphogenesis, hormonal control, and mineral acquisition are emphasized. The Laboratory ( $\mathbf{3}$ hours) has an open-ended design with an emphasis on repeatability of experimental results.
Corequisite: BIOL 255L Plant Physiology Lab.
Prerequisites: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; and CHEM 107/107L Principles of Chemistry with Lab.

BIOL 260/260L Cell Biology with Lab
(1.25 Course-credits)

A study of the cell's biological and biochemical processes, with an emphasis on the relationship between structure and function of molecules and organelles. Laboratory ( $\mathbf{3}$ hours).
Corequisite: BIOL 260L Cell Biology Lab
Prerequisites: CHEM 108 Principles of Chemistry and Quantitative Analysis; MATH 180 Precalculus; and either BIOL 130/1301 Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; or permission of instructor.

BIOL 262/262L Molecular Biology with Lab
(1.25 Course-credits)

An examination of the way the cell accesses, uses, and maintains the information stored in the genome. It begins with an overview of DNA structure and topology, continues with replication, transcription, and translation, and concludes with gene regulation. Special topics could include cancer, stem cells, and RNAi, and focusing on the structure-function relationships of the molecules involved in these processes. Laboratory ( $\mathbf{3}$ hours).
Corequisite: BIOL 262L Molecular Biology Lab
Prerequisites: BIOL 135/135L Foundations of Biological Science with Lab and CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab; or permission of the instructor.

## BIOL 291 Principles of Tropical Ecology and Conservation: Field Study

An examination of ecological principles as they apply to tropical ecosystems. Topics covered include tropical climate and soils, geological history of Central America, biological diversity, characteristics and types of tropical communities, types of interactions among community members, ecological succession, anthropogenic impacts and conservation. The course requires a 1-2 week field trip during spring break or after the end of the semester to a tropical ecosystem (at additional cost). The field portion of this course includes some strenuous activities; students are strongly encouraged to consider whether they are physically and emotionally prepared for rigorous activity and travel in a developing nation. Note: This course is open only to majors/minors in Biology or Environmental Science \& Policy.
Prerequisites: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; and permission of the instructor.

BIOL 320/320L Animal Behavior with Lab
(1.25 Course-credits)

A study of the influence of natural selection on the behavior of animals. This course emphasizes the distinction between the immediate causes of behavior, including external stimuli and internal physiological mechanisms, and the ultimate consequences or survival value of behavior. Topics such as learning and instinct, aggression, territoriality, communication, and social behavior are discussed.
Laboratory (3 hours).
Corequisite: BIOL 320L Animal Behavior Lab.
Prerequisite: BIOL 248/248L Principles of Ecology with Lab or BIOL 269 Sex, Brains, and Hormones or permission of the instructor.

BIOL 321/321L Limnology with Lab
(1.25 Course-credits)

The study of inland aquatic ecosystems including lakes, rivers, and wetlands. Links between the abiotic environment and biota are emphasized. Topics may include physical-chemical gradients, biogeochemical cycles, freshwater organisms, species interactions, and the impact and management of human stressors (e.g., eutrophication, acid deposition, invasive species, and climate change). Students learn standard field sampling techniques and lab analyses and apply these methods as they examine current scientific questions and issues. Laboratory (3 hours) includes field trips.
Corequisite: BIOL 321L Limnology Lab.
Prerequisite: BIOL 248 Principles of Ecology or permission from instructor.

## BIOL 323 Biology and Conservation of Crocodiles

An examination of crocodilians including diversity, thermal requirements, reproduction, life history, feeding, and conservation biology. Special emphasis is placed on modern research perspectives and current state management plans of crocodilians.
Prerequisite: Any 200-level Biology course (BIOL prefix); or permission of the instructor.
BIOL 335/335L Principles of Wildlife Biology with Lab
(1.25 Course-credits)

A study of the distribution of major wildlife groups in the United States. The principles of wildlife management and evaluation of land and water habitats are stressed, as well as population growth dynamics and field procedures. Laboratory ( 3 hours).
Corequisite: BIOL 335L Principles of Wildlife Biology Lab
Prerequisites: CHEM 107 Principles of Chemistry and either BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab.

BIOL 344/344L Animal Physiological Ecology with Lab
(1.25 Course-credits)

An introduction to the physiological adaptations and mechanisms by which animals compensate for environmental variation. Laboratory ( $\mathbf{3}$ hours). Note: Students may not receive credit for both this course and BIOL 224/224L Animal Physiological Ecology.
Corequisite: BIOL 344L Animal Physiological Ecology Lab.
Prerequisite: BIOL 248/248L Principles of Ecology with Lab with a minimum grade of C- (1.70); or permission of the instructor.

## BIOL 356 Biology of Cancer

An overview of the biology of cancer. Topics include the process of oncogenesis, the cellular mechanisms of oncogenes and tumor suppressors, chemotherapeutics, and targeted cancer therapies. Prerequisite: BIOL 208/208L Genetics with Lab or BIOL 260/260L Cell Biology with Lab or BIOL 262/262L Molecular Biology with Lab or CHEM 300/300L Principles of Biochemistry with Lab or CHEM 301/301L Biochemistry I with Lab; or permission of instructor.

## BIOL 381 Theories of Infectious Diseases

An introduction to human infectious disease. Topics include: microbial pathogenic mechanisms, contemporary diagnostic techniques, and treatment, if available. Peer reviewed primary articles are the main source of information. No Laboratory.
Prerequisite: BIOL 228/228L Microbiology with Lab or permission of the instructor.

## BIOL 390 Special Topics in Biology

An in-depth examination of a field or subject matter in the Biological Sciences. Specific topics are announced prior to each term when offered, at the discretion of the Department. This course may be taken twice, provided a different special topic is being examined.
Prerequisite: Junior or senior standing and two (2) Biology courses (one must have a laboratory); or permission of the instructor. Additional prerequisites may be required dependent upon topic.

## BIOL 393 Wildlife Management and Conservation Topics

An opportunity to explore the most current wildlife management and conservation issues and evaluate potential solutions. Wildlife issues are complex and require the integration of skills in data analysis, adaptive management planning, cost-benefit analyses, and collaborative decision-making. Due to the dynamic nature of environmental, political, and social pressures, the issues are everchanging and are selected from professional wildlife publications and proposed regulatory changes. Topics range from global to local and may include: emerging wildlife diseases, endangered species regulatory review, climate adaptation for wildlife management plans, predator expansions into urban environments, exotic species invasions, and genetic techniques for wildlife conservation. Students read scientific literature, engage in group discussions and project planning, and summarize the science, issues, plans and decisions in written formats. Note: Students may not receive credit for both this course and BIOL 360 Wildlife Management \& Conservation Topics.
Prerequisite: BIOL 335/335L Principles of Wildlife Biology with Lab.

## BIOL 400 Trends in Biotechnology

A seminar that explores the history and process of genome modification. Students read a series of seminal research papers, beginning with the earliest papers on DNA structure and molecular cloning published in the 1950 's-1970's, continuing with historically relevant papers that built on early advances, and ending with recent breakthroughs in the field of gene editing. The process of science is evaluated for each paper, including the generation of an experimental question, experimental design using existing tools and/or developing new tools, and analysis of results. Students discuss the history, science, and social implications of each breakthrough in technology. Note: Students may not receive credit for both this course and BIOL 453 Seminar in Recombinant DNA Technology.
Prerequisites: BIOL 230 Professional Communication in Biology and either BIOL 208/208L Genetics with Lab or BIOL 262/262L Molecular Biology with Lab, or permission of instructor.

## BIOL 402 Processes of Organic Evolution

A study of the historical development of evolutionary thought in the pre- and post-Darwinian periods; the interplay among mutations, recombination, gene flow, natural selection, and genetic drift in determining the direction of evolutionary change; isolating mechanisms and the origins of species; the role of polyploidy in plant evolution; the significance of hybridization in evolution and speciation; and evidences of evolution from various disciplines. No laboratory.
Prerequisites: Senior Status, BIOL 208/208L Genetics with Lab, and BIOL 230 Professional Communication in Biology; or permission of instructor.

## BIOL 426 Human Immunity

An examination of the human immune system at the molecular and cellular level. Topics include humoral immunity, cell-mediated immunity, immunization-based immunity and diseases impacting the immune system. Students read and analyze primary literature to enhance their investigation of the topics. Note: Students may not receive credit for both this course and BIOL 340 Immunology. Prerequisites: BIOL 230 Professional Communication in Biology and BIOL 262/BIOL 262L Molecular Biology with Laboratory; or permission of the instructor.

## BIOL 432 Vertebrate Development

An examination of the molecular regulation of embryogenesis and early development. Topics include fertilization, proliferation, morphogenesis, formation of germ layers, and body axis determination. Students read and analyze primary literature to enhance their investigation of the topics. Note: Students may not receive credit for both this course and BIOL 409 Developmental Biology.
Prerequisites: BIOL 230 Professional Communication in Biology and BIOL 262/BIOL 262L Molecular Biology with Laboratory; or permission of the instructor.

## BIOL 460 Research Experience in Biology

A synthesis of the undergraduate biology experience. Students work on research projects under the supervision of a member of the Biology Department. Projects may include laboratory techniques, field skills, experimental design, data analysis, and scientific communication. This course is open to Biology majors only. Course meets for six (6) hours per week. Content and assignments vary by semester and instructor.
Prerequisites: MATH 208 Biostatistics or ENVS 202 Data Analysis for Scientists; four (4) Biology courses at the 200 -level or above, a minimum GPA of 2.00 in courses within the major, and completion of BIOL 230 Professional Communication in Biology with a grade of C- (1.70) or higher; or permission of the instructor.

## BIOL 490 Independent Study in Biology

An opportunity for the Biology major to work independently in an area relevant to the student's special interests. Each student's experience is planned in cooperation with a department member. Progress reports and final written and oral reports are required.
Prerequisites: Biology major of junior or senior standing, two semesters completed at Framingham State University, overall QPA of 2.50, and approval of the department chair. The independent study option is reserved for those students who have previously demonstrated sufficient motivation and self-discipline to work independently.

## BIOL 495 Internship in Biology

A supervised field study in the area of the student's interest that complements formal course work. The internship program is offered through cooperation of participating institutions that provide guidance for the interns. A minimum of 160 on-site hours is necessary to complete the internship in Biology and must be verified by the on-site supervisor and a member of the Biology faculty. The 160 hours must be completed within one semester. The internship in Biology may be taken for one (1) course-credit in the major as a free elective. A student may not enroll in an internship more than twice (two (2) course-credits). Any student interested in participating in an internship must consult with the Biology Department chair prior to the middle of the semester preceding the semester of the desired internship. A written plan for the internship must be submitted by the student to the department chair. The plan must be approved by the department chair as well as the faculty member who serves as internship coordinator. The student must meet with the faculty internship coordinator at least four times during the semester. The grade for the internship is assigned by the internship coordinator and the on-site supervisor. Data gathered during the internship may not be utilized for BIOL 407 Methods in Biological Research II.
Prerequisites: Biology majors of senior standing, two semesters completed at Framingham State University, overall GPA of 2.50 with a 2.75 average in courses for the major, and approval of the department chair.

## BUSINESS ANALYTICS COURSES

## BUAN 204 Analytical Techniques for Business (Gen. Ed. Domain II-A)

A survey of analytical techniques for business decision making. Emphasis is placed on mathematical and statistical applications in a business context. Topics include basic functions, differential calculus for optimization applications in business, and statistical data analysis methods such as multiple regression, data visualization, chi-square test, experimental design, and analysis of variance (ANOVA). Appropriate statistical software such as Excel or Tableau are used.
Prerequisite: STAT 107 Business Statistics.

## BUSINESS INFORMATION SYSTEM COURSES

## BUIS 200 Introduction to Business Systems

An introductory study of information systems from a business problem-solving perspective. Topics include technical and organizational foundations of information systems, the use of information systems to support critical business operations and to achieve strategic objectives, common approaches to building information systems, and management of information system resources. The course emphasizes the use of computers to analyze, coordinate, and solve organizational decisionmaking problems. Note: Students may not receive credit for both BUIS 200 Introduction to Business Systems and 12.208 Microcomputer Applications in Business.

## BUIS 411 Information Systems Research

An overview of theories, methods and tools used in Information Systems research. Students conduct literature reviews, gather empirical materials and present findings using written and presentation formats acceptable in the field. Students develop skills to evaluate specific studies and identify their limitations. In addition to conducting original research, students learn to analyze business cases. Students are introduced to models and approaches used to analyze business cases, and perform business case analysis using these tools. Students share their findings through a written report and oral presentation. Research and case topics include IT and data security and regulation, ethical use of data and technology, emerging and disruptive technology.
Prerequisites: Junior Standing, MGMT 280 Organizational Behavior, a 300-level course in Computer Science, and, either QUAN 202 Statistical Analysis for Business and Economics or STAT 117 Statistics.

## BUIS 460 Information Systems Management

A team-based and problem-based application of theories and industry practices used to evaluate, design and implement technology solutions to business problems. Assignments are designed to develop client management, project management, systems development, and presentation and communication skills. Students work in teams to complete projects based upon actual organizations or using business cases. Student projects may be evaluated by an industry panel. Students define a problem statement and justification, requirements analysis, and preliminary and final designs. Course topics may include software and hardware evaluation, strategic use of technology, service level agreements, project planning and control, software sources and licensing, outsourcing, vendor management, ROI requirements and cost/benefit analysis.
Prerequisites: Senior Standing, ACCT 220 Introduction to Financial Accounting, a 300- level course in Computer Science, and MGMT 280 Organizational Behavior.

## CHEMISTRY COURSES

## CHEM 101 The Chemistry of Life (Gen. Ed. Domain II-B)

An exploration of the origin of life on a molecular basis; a familiarization with the basic chemistry of living organisms and their environment; an understanding of the laws that govern life; and a discussion on the fate of life as a consequence of drugs and man's chemical pollution of the earth's atmosphere, soil and water. Designed as a terminal non-laboratory course for the liberal arts nonscience student.

## CHEM 103/103L Introductory Chemistry with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

A one-semester introductory chemistry course focusing on the fundamental core concepts of inorganic chemistry. Topics include scientific measurements, atomic-molecular theory, properties of the elements, chemical bonding, intermolecular attractions, energy and matter, liquids, solids, and gases, solutions, basic types of chemical reactions, chemical equilibrium, acids and bases, and nuclear chemistry. These core concepts are explored and expanded upon during weekly laboratory sessions. Laboratory ( $\mathbf{3}$ hours). Note: This course does not satisfy the Chemistry major requirement or the Chemistry minor requirement. Students wishing to pursue advanced study in biology, chemistry, engineering, food science, and the nutrition and dietetics concentration for the food and nutrition major should take CHEM 107 Principles of Chemistry and CHEM 108 Principles of Chemistry and Quantitative Analysis.
Corequisite: CHEM 103L Introductory Chemistry Lab.
Prerequisite: Concurrent enrollment in a 100 -level course in mathematics or eligibility to enroll in MATH 180 Precalculus.

## CHEM 107/107L Principles of Chemistry with Lab (Gen. Ed. Domain II-B)

(1.25 Course-credits)

A study of the fundamental principles of chemistry designed to meet the needs of science majors as well as those pursuing a pre-health curriculum or those seeking a rigorous introduction to chemistry. Topics covered include unit conversions and dimensional analysis, history and structure of the atom, stoichiometry, chemical reactions, solutions, periodicity, and molecular geometry and bonding theories. The laboratory teaches techniques of chemical experimentation including chemical hygiene, the scientific method and keeping a laboratory notebook. Laboratory ( $\mathbf{3}$ hours) meets three hours per week.
Corequisite: CHEM 107L Principles of Chemistry Lab.
Prerequisite: Concurrent enrollment in MATH 123 Introduction to Functions or eligibility to enroll in MATH 180 Precalculus.

## CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab

## (Gen. Ed. Domain II-B)

(1.25 Course-credits)

A continuation of Principles of Chemistry and is designed to meet the needs of science majors as well as those pursuing a pre-health curriculum. Topics include gas laws, equilibrium, kinetics, thermodynamics, and acid/base chemistry. Laboratory focuses on techniques of quantitative analysis: preparations of solutions, wet chemical analysis using volumetric glassware, chemical measurements using pH electrodes and spectrophotometers, data analysis and laboratory report writing. Laboratory (4 hours).
Corequisite: CHEM 108L Principles of Chemistry and Quantitative Analysis Lab.
Prerequisites: Completion of CHEM 107 Principles of Chemistry with a minimum grade of C-
(1.70) and either completion of MATH 123 Introduction to Functions with a minimum grade of C-
(1.70) or eligibility to enroll in MATH 180 Precalculus.

## CHEM 131/131L Science - Environment and Health with Lab

 (Gen. Ed. Domain II-B)(1.25 Course-credits)

An integrative laboratory science course to prepare non-science majors to make informed decisions relating to the environment, health, and technology. Central principles of physical, environmental, and biological chemistry are discussed, with application of these principles to current events. Assignments and laboratory sessions apply theoretical principles to everyday life. Laboratory (3 hours).
Corequisite: CHEM 131L Science - Environment and Health Lab.
Prerequisite: MATH 123 Introduction to Functions is recommended background.

## CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab

(1.25 Course-credits)

A one-semester introductory chemistry course intended to provide the fundamental core concepts of organic chemistry and biochemistry. Core concepts include identification of organic functional groups and their most common reactions, and identification of biological compounds such as carbohydrates, lipids, proteins, enzymes, and nucleic acids as well as their properties and metabolic pathways. These core concepts are explored and expanded upon during weekly laboratory sessions. Laboratory (3 hours).
Corequisite: CHEM 201L Introductory Organic Chemistry and Biochemistry Lab.
Prerequisite: CHEM 103 Introductory Chemistry or CHEM 107 Principles of Chemistry.

## CHEM 207/207L Organic Chemistry I with Lab

(1.25 Course-credits)

An in-depth course which covers structure, properties, preparation, and reactions of the principal classes of organic compounds. The chemistry of aliphatic hydrocarbons, alkenes, alkynes, and alkyl halides is introduced. Substitution, elimination, and addition reactions are covered in detail, with an emphasis on reaction mechanisms. Laboratory introduces the standard techniques (distillation and reflux, crystallization and melting points, extraction, column and gas chromatography, IR spectroscopy and Mass Spectrometry) used for the synthesis, purification and identification of organic compounds and illustrates some typical reactions of alkanes, alkenes and alcohols.
Laboratory (4 hours).
Corequisite: CHEM 207L Organic Chemistry I Lab.
Prerequisite: Completion of CHEM 108 Principles of Chemistry and Quantitative Analysis with a minimum grade of C - (1.70).

## CHEM 208/208L Organic Chemistry II with Lab

(1.25 Course-credits)

A continuation of CHEM 207 Organic Chemistry I. Aromatic compounds, alcohols, aldehydes, ketones, amines, carboxylic acids and their derivatives are studied. The course also includes aromatic substitution, acyl transfer, and carbonyl condensation reactions with emphasis on understanding reaction mechanisms and synthetic applications. Laboratory work reinforces synthetic techniques (preparation, purification, and identification) as well as 1 H and 13C NMR spectroscopy. Laboratory (4 hours).
Corequisite: CHEM 208L Organic Chemistry II Lab.
Prerequisite: CHEM 207 Organic Chemistry I with a minimum grade of C- (1.70).

## CHEM 241 Introduction to Heat and Mass Transfer

An application-oriented introduction to the theory of heat and mass transfer with a particular emphasis on fluid flow, energy balance, and material balance. The course covers the fundamental principles of heat transfer, including conduction, convection, and radiation, as well as the principles of mass transfer. The theoretical aspects of heat and mass transfer are applied to design heat exchangers and heat transfer equipment.
Note: Food Science Majors are not eligible to take this course.
Prerequisite: PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab or PHYS 211/211L Principles of Physics I with Lab.

## CHEM 300/300L Principles of Biochemistry with Lab (1.25 Course-credits)

A study of the principles of biochemistry including the chemistry of carbohydrates, lipids, nucleic acids, amino acids and proteins. Topics covered include the structure and function of biological compounds, energy transformation, bioenergetics, enzyme function and kinetics and the principles of metabolic regulation. Emphasis is placed on the chemistry of macronutrients, vitamins and coenzymes. The underlying theme of this course is to introduce the concept of homeostasis and how it relates to intermediary metabolism of carbohydrates, fats and nitrogen-containing materials such as amino acids, proteins and related compounds. Note: This course is designed to serve the needs of students whose program requires only CHEM 207 Organic Chemistry I. Note: Students may not receive credit for both this course and CHEM 301 Biochemistry I. Laboratory (4 hours). Corequisite: CHEM 300L Principles of Biochemistry Lab.
Prerequisites: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; and completion of CHEM 207/207L Organic Chemistry I with Lab with a minimum grade of $\mathrm{C}-(1.70)$.

## CHEM 301/301L Biochemistry I with Lab

(1.25 Course-credits)

A study of the chemical aspects of biological activity emphasizing the structure and function of carbohydrates, lipids, nucleic acids, amino acids and proteins. Topics include the study of protein function, enzymes and bioenergetics and how they relate to the intermediary metabolism of carbohydrates, fats and proteins. The underlying theme of this course is not merely a cataloging of the structure and metabolism of biological compounds, but rather is an understanding of the cellular and molecular logic of living organisms. Note: Students may not receive credit for both this course and CHEM 300 Principles of Biochemistry. Laboratory (4 hours).
Corequisite: CHEM 301L Principles of Biochemistry I Lab.
Prerequisites: BIOL 130/130L Principles of Biology with Lab or BIOL 135/135L Foundations of Biological Science with Lab; and completion of CHEM 208/208L Organic Chemistry II with Lab with a minimum grade of $\mathrm{C}-(1.70)$.

## CHEM 303/303L Physical Chemistry I with Lab

(1.25 Course-credits)

An introduction to the principles of physical chemistry. Topics covered include chemical thermodynamics, solutions, chemical equilibrium, electrochemistry, transport properties, and phenomenological chemical kinetics. Laboratory (4 hours).
Corequisite: CHEM 303L Physical Chemistry I Lab.
Prerequisites: CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab, PHYS 212/212L Principles of Physics II with Lab, and MATH 220 Calculus II; or permission of the instructor.

## CHEM 304/304L Physical Chemistry II with Lab

(1.25 Course-credits)

A continuation of CHEM 303 Physical Chemistry I. Topics covered include an introduction to quantum chemistry, atomic and molecular structure, spectroscopy, kinetic molecular theory, and theoretical chemical kinetics. Laboratory (4 hours).
Corequisite: CHEM 304L Physical Chemistry II Lab.
Prerequisite: CHEM 303 Physical Chemistry I or permission of the instructor.

## CHEM 321/321L Instrumental Analysis with Lab

(1.25 Course-credits)

An introduction to the theory and application of common chemical instrumentation with associated laboratory. Topics include spectroscopic methods (atomic and molecular absorption and emission, nuclear magnetic resonance, and mass spectrometry), electrochemical methods (potentiometry and voltammetry), and chromatographic methods (GC, HPLC). Laboratory (4 hours).
Corequisite: CHEM 321L Instrumental Analysis Lab.
Prerequisites: CHEM 208 Organic Chemistry II and PHYS 212 Principles of Physics II.

## CHEM 332/322L Biochemistry II with Lab

(1.25 Course-credits)

A continuation of CHEM 301 Biochemistry I, which covers basic nucleotide chemistry. Informational biomolecules, nucleotide metabolism, cell signaling and regulatory mechanisms, molecular physiology, protein structure and catalysis, regulation of biochemical processes, and integrated metabolic systems are studied in-depth. Laboratory emphasizes structural analysis of DNA and proteins, isolation and identification of DNA and proteins and control of gene expression.
Laboratory (4 hours).
Corequisite: CHEM 332L Principles of Biochemistry II Lab.
Prerequisites: CHEM 208 Organic Chemistry II and CHEM 301 Biochemistry I.

## CHEM 390 Special Topics in Chemistry

An in-depth examination of topics in chemistry at a level beyond that of introductory courses. Topics vary depending on the interests of the instructor, and may be interdisciplinary. Active student participation is required. This course may be taken twice, provided a different special topic is being offered.
Prerequisite: CHEM 208 Organic Chemistry II or permission of the instructor. Additional prerequisites may be required dependent upon topic.

## CHEM 401/401L Inorganic Chemistry with Lab

(1.25 Course-credits)

An introduction to the theories of structure and bonding used in inorganic chemistry and a study of the descriptive chemistry of the elements and their representative compounds. Topics covered include atomic structure and trends in the periodic table, structure and bonding in crystalline lattices, valence bond and molecular orbital theories of covalent bonding, descriptive chemistry of the non-transition elements, properties of transition metals, and structure and bonding in transition metal complexes interpreted in terms of the valence bond, crystal field and molecular orbital theories. Laboratory (4 hours).
Corequisite: CHEM 401L Inorganic Chemistry I Lab.
Prerequisite: CHEM 208 Organic Chemistry II.

## CHEM 480 Chemical Research I

Designed to develop a working appreciation of methods of scientific inquiry through development of an original research project. Topics include the selection of a research problem, examination of the chemical literature, study of advanced safety issues, interpretation of data, and the reporting of results. Students initiate a research project with a faculty member and make significant progress on the project.
Prerequisites: CHEM 208 Organic Chemistry II, a minimum cumulative QPA of 1.70 in all Chemistry courses, and permission of instructor.

## CHEM 481 Chemical Research II

A continuation of CHEM 480 Chemical Research I in which the students complete their research project under the supervision of a faculty member. The two-semester research experience is completed with a formal written report and seminar presentation.
Prerequisite: Completion of CHEM 480 Chemical Research I with a minimum grade of C- (1.70).

## CHEM 490 Independent Study in Chemistry

An in-depth study of a selected advanced chemistry topic or topics under the direction of a chemistry faculty member. The grade is based on a written report of the study and/or oral exam.

## CHEM 495 Internship in Chemistry

A supervised work experience in an area of the student's interest that complements formal course work. The internship program is offered through cooperation of participating institutions that provide guidance for the interns. A minimum of 160 on-site hours is necessary to complete the internship in Chemistry and must be verified by the on-site supervisor and a member of the Chemistry faculty. The 160 hours must be completed within one (1) semester. The internship in Chemistry may be taken for one (1) course credit in the major as a free elective. A student may not enroll in an internship more than twice (two course credits). Any student interested in participating in an internship must consult with the department chair prior to the semester of the desired internship. A written plan for the internship must be submitted by the student to the department chair. The plan must be approved by the department chair as well as the faculty member who serves as internship coordinator. The student must meet with the faculty internship coordinator at least four (4) times during the semester. The grade for the internship is assigned by the internship coordinator with input from the on-site supervisor. Data gathered during the internship may not be utilized for CHEM 480 Chemical Research I or CHEM 498 Chemical Research II.
Prerequisites: Chemistry majors of Junior or Senior standing, two (2) semesters completed at Framingham State University, overall QPA of 2.50 with a 2.70 average in courses for the major, and approval of the department chair.

## CHILD AND FAMILY STUDIES COURSES

## CFST 118 Child, Family, School, and Community: Connections and Collaborations

 (Gen. Ed. Domain III-B)An introduction to the diverse contexts of children, families, schools, and communities in the United States. Attention is given to the connections between these institutions and how they can be utilized to support the learning and development of children. The roles of professionals who work in schools and community-based organizations are also explored. Note: Students may not receive credit for both this course and CFST 209 Child, Family, School, and Community: Connections and Collaborations.

## CFST 212 Disability in Society

An introduction to the concept of disability in society, with an emphasis on marginalization, intersectionality, accessibility, and disability justice. Students explore the medical and social models of understanding disability, examining media representations of people with disabilities that reinforce harmful stereotypes, as well as those promoting disability as a natural, normal feature of human diversity. Students examine the intersectionality of ableism with racism, xenophobia, sexism, heterosexism, trans discrimination, and other identity-based forms of oppression. Through an investigation of family systems, students learn about the experiences of parents of disabled children and children of disabled parents. Finally, through field-based experiences, students propose and conduct participatory action research from a lens of disability justice, culminating in a final research project with implications for their communities.
Prerequisite: ENWR 110 Composition II

## CFST 301 Infant and Toddler Curriculum

A study of the development, care, and education of infants and toddlers, pre-natal through age three. Topics include rationales and strategies for supporting the development of the whole child, including cognitive, language, social-emotional, and physical development in a safe, responsive environment. The course emphasizes relationship-based care and education with special attention to the unique environmental aspects of programs for children from birth to age three.
Prerequisite: PSYC 200 Psychology of Development, PSYC 201 Child Development, or SOCI 212 Sociology of Families.

## CFST 311 Pre-School Curriculum: Language Development and Early Literacy

An examination of theories of language development and emergent literacy in young children. This course includes careful study of young children's language development in the contexts of play and in interactions with print-based and multi-modal texts. Students examine emergent reading and writing as meaning-making processes and consider multiple pedagogical and curricular tools for supporting young children's language and literacy learning.
Prerequisite: PSYC 200 Psychology of Development, PSYC 201 Child Development, or SOCI 212 Sociology of Families.

CFST 312 Pre-school Curriculum: Integrating Math, Science, Social Studies, and Art An examination of emergent curriculum methodologies to focus on designing, implementing, and evaluating appropriate activities and environments for pre-school children. Students learn to integrate the use of blocks, art materials, and web-based technologies with literacy concepts into science, social studies, and math. Using current research, this course prioritizes the use of concrete, practical applications of different philosophies and theories embedded in early childhood education curricula. Students engage in inquiry and project work for developing, implementing, and assessing curriculum. The focus is on planning stimulating learning environments that promote discovery and curiosity. Students also learn to assess and document children's work in order to best communicate with the child's family.
Prerequisite: Either PSYC 200 Psychology of Development or PSYC 201 Child Development.

## CFST 321 Theory and Practice of Play

An exploration of classic and contemporary theories of play. Hands-on investigations apply these theories to highlight the many forms and benefits of playful learning for children, aged birth to young adult. Specific topics addressed include creativity; imagination; cognitive, social, physical, and emotional development; and the influence of the environment and materials. Students learn ways to observe, assess, and use play to make decisions about learning and to guide or facilitate play experiences.
Prerequisite: CFST 118 Child, Family, School, and Community: Connections and Collaborations.

## CFST 333 Community-Based Education

An exploration of classic and contemporary theories of play. Hands-on investigations apply these theories to highlight the many forms and benefits of playful learning for children, aged birth to young adult. Specific topics addressed include creativity; imagination; cognitive, social, physical, and emotional development; and the influence of the environment and materials. Students learn ways to observe, assess, and use play to make decisions about learning and to guide or facilitate play experiences.
Prerequisite: CFST 118 Child, Family, School, and Community: Connections and Collaborations.

## CFST 390 Special Topics in Child and Family Studies

An in-depth examination of issues connected to child and family studies. Topics may vary, with particular emphasis on the contributions of recent research. This course, on a different topic, may be repeated for credit.
Prerequisites: Completion of two (2) required courses in the Child and Family Studies major or permission of instructor.

## CFST 405 Administration and Leadership of Early Education and Care Settings

An overview of effective leadership and administration of early education and care programs for children from birth through age eight. Students examine types of leadership models, theories of management, quality programming, and program assessment. Public policy-making processes and regulations that impact children, families, schools, and communities are examined. Specific administration topics and leadership skills addressed include leadership and advocacy; family and community relationships; transitions in care and education from birth through age eight; staff management; public relations and marketing; educational programming; regulatory, legal, and accreditation requirements; and fiscal management. Early childhood topics include child development, curriculum and instructional methods, learning environments, health, safety, nutrition, classroom guidance, children with special needs, and professional development.
Prerequisites: Two (2) of the following courses: CFST 301 Infant and Toddler Curriculum, CFST 311 Pre-School Curriculum: Language Development and Early Literacy, or CFST 312 Pre-school Curriculum: Integrating Math, Science, Social Studies and Art; or permission of the instructor.

## CFST 440 Research in Child and Family Studies

An overview of qualitative, quantitative, and mixed methods studies. During the course, students complete a research project related to the field of child and family studies. Students develop a research question, undertake a literature review, evaluate ethical considerations, collect and analyze data, and identify possibilities for future research.
Prerequisite: Junior or senior standing.

## CFST 490 Independent Study in Child and Family Studies

An investigation into a topic in Child and Family Studies selected by the student, with the guidance of a faculty member in the Education Department. The student and faculty member work collaboratively to select a topic, identify the scope and sequence of the independent study, and establish required outcomes for the course. All proposals must be accepted by the instructor and approved by the Department Chair.
Prerequisite: Declared Child and Family Studies Major.

## CFST 495 Internship in Child and Family Studies

A supervised experience in a program or agency with professional relevance to careers in child and family studies. A minimum of 8 hours per week ( 120 hours total) of field experience is required. Students must consult with the program area chair for Child and Family Studies by the middle of the semester prior to the beginning of the desired internship. Before registration, the student must submit a proposal outlining the internship and showing how it integrates with the student's academic program. A culminating assignment in the form of a written report and/or public presentation is required. The field work is supported by class meetings on campus, and career planning is integrated into the course. The internship experience is evaluated by the faculty supervisor with feedback from the on-site supervisor. A student may earn up to two (2) internship course credits during two different semesters. Note: Open to Child and Family Studies majors only.
Prerequisites: Completion of at least two (2) courses in the major; permission of the Education Department chair or Child and Family Studies program area chair.

## CHINESE COURSES

## CHIN 101 Elementary Chinese I (Gen. Ed. Domain I-C)

An integration of language and culture designed to provide beginners with basic functional language skills, both oral and written, and an appreciation of Chinese cultures. Note: Heritage speakers and students with previous experience in this language must take a placement test.

## CHIN 102 Elementary Chinese II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills, both oral and written, and an appreciation of Chinese cultures.
Prerequisite: Students must either complete CHIN 101 Elementary Chinese I or have the corresponding placement test score, or have prior approval of the instructor in order to enroll in this course.

## CHIN 118 Chinese Writing System and Calligraphy (Gen. Ed. Domain I-B)

A survey of the Chinese writing system through analysis, interpretation, and practice for all majors. This course introduces the diachronic development of the Chinese writing system, from the oracle bone script, bronze script, seal scripts, to several modern scripts, and aims to stimulate students' imagination and appreciation of the characters. Readings and discussions focus on the basic principles on which characters are formed and the various styles that have evolved over time. Students gain hands-on experience by practicing calligraphy, and strengthen their awareness of characters as a medium of visual communication and calligraphy as a visual art. Note: Completion of or concurrent enrollment in CHIN 101 Elementary Chinese I is recommended.

## CHIN 186 Through the Dragon's Eyes: Modern China's Cultures and Traditions (Gen. Ed. Domain III-C)

An introduction to the customs and culture of ancient and modern China with a language component. The course examines China's traditions and current trends and relates them to the role China plays in areas such as travel, business, and education. Discussion is conducted in English. The language component introduces practical terminology and usage that help students develop basic survival speaking skills in Mandarin Chinese.

## CHIN 201 Intermediate Chinese I (Gen. Ed. Domain I-C)

A review of basic grammatical structures and characters and continued work toward building competency in Chinese language and culture. Additional characters are added to sharpen reading, writing, listening and speaking skills, with the aim of transferring knowledge gained from the character pattern approach at the elementary levels to work with authentic Chinese texts at the advanced level.
Prerequisite: CHIN 102 Elementary Chinese II or permission of instructor.

## CHIN 202 Intermediate Chinese II (Gen. Ed. Domain I-C)

A continuation of the language and culture skill building beyond CHIN 202 Intermediate Chinese I for which vocabulary and character knowledge are expanded for the advancement of speaking and writing skills. Students work with simple authentic texts to further their knowledge of Chinese culture.
Prerequisite: CHIN 201 Intermediate Chinese I or permission of instructor.

## CHIN 246 Chinese Culture and Civilization in English Translation

A survey of the history of Chinese culture and civilization. Topics include culture, society, cuisine, religion, visual arts, and performing arts, providing a broad understanding of the Chinese culture. The course is conducted in English.

## COMMONWEALTH HONORS PROGRAM COURSES

## HNRS 101AH First-Year Honors Seminar: Storytelling through Art History

(Gen. Ed. Domain III-C)
An exploration of a topic or theme in art history designed to engage First-Year students and to facilitate their transition to the University. Students examine art in its various forms and how issues of race, identity, diversity, and societal structure are portrayed through the various art forms over time. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101BI First-Year Honors Seminar: Biological Perspectives

(Gen. Ed. Domain II-B)
An in-depth exploration of a topic in biology designed to engage first year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of biology, from the level of molecules and cells to organisms and ecological systems. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No Laboratory. Note: Students who successfully complete this course cannot take a course with a BIOL prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 102BI First-Year Honors Seminar Biological Science and Society

(Gen. Ed. Domain III-C)
An examination of how biological science, scientific information and the process of science impacts society. Students examine how science is conducted within particular social structures, and how science can be used to help solve major societal problems. The role of ethics in conducting research and the utilization of data are also examined. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and the integration into the university community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101CH First-Year Honors Seminar: Topics in Chemistry

(Gen. Ed. Domain II-B)
An in-depth exploration of a topic in chemistry or biochemistry designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of chemistry or biochemistry, from the level of atoms and molecules in our daily life to everything in the Universe. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No Laboratory. Note: Students who successfully complete this course cannot take a course with a CHEM prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101CM First-Year Honors Seminar: The Power of Communication

(Gen. Ed. Domain III-B)
An exploration of a particular topic or theme within the field of Communication, Media, and Performance. In the process of a focused theoretical and practical examination of one or more of the many ways in which communication is powerful, First-Year students are introduced to resources and strategies that support student academic success and integration into the University community. Students work in groups and individually to craft creative and critical statements, both orally and in writing. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101ED First-Year Honors Seminar: Diverse Perspectives in Education

(Gen. Ed. Domain III-C)
An exploration of a topic central to educational research, theory, or practice, chosen to draw FirstYear students into a critical understanding of how diverse environments, contexts, and materials shape a learner's experiences. While engaging in a deep analysis of this selected topic, students are oriented to resources on and off campus related to academic and social supports, strategies for adjustment and success at the university, and effective ways to engage with the campus community. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101EN First-Year Honors Seminar: Explorations in Literature

(Gen. Ed. Domain I-B)
An exploration of literature designed around a particular theme. First-Year students engage with a variety of texts and use literary or film analysis as the basis for their inquiry while being introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 102EN First-Year Honors Seminar: Literature and the Contemporary

(Gen. Ed. Domain III-B)
An exploration of literature that focuses on human diversity in the contemporary world. First-Year students engage with a variety of texts and use literary or film analysis as the basis for their inquiry while being introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 103EN First-Year Honors Seminar: Creative Thinking through Creative Writing <br> (Gen. Ed. Domain I-A)

An exploration of creative thinking through creative writing designed to engage First-Year students in interpretive work. Students read a range of texts and use literary or film analysis as a basis for their own creative writing. Students are introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101ES First-Year Honors Seminar: Earth Science Perspectives

(Gen. Ed. Domain II-B)
An in-depth exploration of a topic in earth science designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of earth science. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. No Laboratory. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101EV First-Year Honors Seminar: Environmental Science and Policy Perspectives (Gen. Ed. Domain III-B)

An in-depth exploration of a topic in Environmental Science and Policy designed to engage FirstYear students while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of environmental science or policy and may vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101FS First-Year Honors Seminar: Topics in Food Science

(Gen. Ed. Domain II-B)
An in-depth exploration of a topic in food science designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of food science, from farm to the fork. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No laboratory. Note: Students who successfully complete this course cannot take a course with a FDSC prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101GY First-Year Honors Seminar: Geographical Perspectives

(Gen. Ed. Domain III-B)
An in-depth exploration of a topic in geography designed to engage First-Year students while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of geography or environmental studies and sustainability. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101HI First-Year Honors Seminar: Explorations of the Past

(Gen. Ed. Domain III-A)
An exploration of a historical topic or theme designed to engage First-Year students in the work of historians and to facilitate their transition to the University. Students engage in a deep exploration of a significant topic or theme related to the past and the study of history while being introduced to resources and strategies that support student academic success and integration into the university community. The historical time period(s) and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 102HI First-Year Honors Seminar: Commemoration and How We

## Remember the Past

(Gen. Ed. Domain III-B)
An introduction to historical memory through the examination of contemporary debates about how ideas, events, and people of the past should be remembered. Commemoration is a result of contemporary choices: what to remember, what to forget, what to emphasize, how to present it. In this course, students study recent and ongoing controversies over how we remember certain periods and individuals from the past, examining the history of the periods, events, and individuals in question, the context for earlier decisions about commemoration, why these are being revisited today, and what current debates reveal about the concerns and priorities of our contemporary society while being introduced to resources and strategies that support student academic success and integration into the university community. The historical time period(s) and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 103HI First-Year Honors Seminar: Topics in Cultural History

(Gen. Ed. Domain I-B)
An exploration of cultural works related to a particular historical topic, theme, or time period designed to engage First-Year students in the interpretive work of cultural historians and to facilitate their transition to the University. Students analyze a range of cultural artifacts within their historical contexts while being introduced to resources and strategies that support student academic success and integration into the university community. The cultural artifacts, historical time period(s), and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 FirstYear Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101NE First-Year Honors Seminar: Topics in Neuroscience

(Gen. Ed. Domain II-B)
An in-depth exploration of a topic in neuroscience designed to engage first year students while being introduced to resources and strategies that support academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of neuroscience. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 102PH First-Year Honors Seminar: Philosophy (Gen. Ed. Domain I-B)

An exploration of a philosophical topic or topics designed to engage First-Year students in philosophical works and to facilitate their transition to the University. Students engage in deep exploration of a philosophical topic or topics while being introduced to resources and strategies that support student academic success and integration into the University community. The philosophical topics covered vary by semester and instructor. NOTE: This course aligns with the RAMS 101 FirstYear Seminar overreaching program description. Open to First-Year students only.

## HNRS 101PS First-Year Honors Seminar: Psychological Perspectives

(Gen. Ed. Domain III-B)
An in-depth exploration of a topic in psychology designed to engage first year while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of psychology, including biological psychology, cognitive psychology, developmental psychology, social \& personality psychology, and mental health. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 101SO First-Year Honors Seminar: Social Dynamics, Culture, and Society

(Gen. Ed. Domain III-B)
An exploration of a topic in sociology designed to engage First-Year students in the basic concepts and topic areas sociologists study and to facilitate their transition to the University. Students are introduced to the study of topics such as culture, social interaction, social inequality, family dynamics, migration and other social issues, while being introduced to resources and strategies that support student academic success and integration into the University community. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to Commonwealth Honors Program First-Year students only.

## HNRS 480 Honors Program Thesis/Project

An independent study for which honors students design and complete research projects under the direction of a faculty supervisor. All students are required to present publicly the results of their projects at a venue approved by the faculty director of the Honors Program. Honors Program Theses are retained in a permanent archive in the Whittemore Library.
Prerequisite: Four (4) courses completed within the Honors Program.

## COMMUNICATION ARTS COURSES

## COMM 107 Effective Speaking (Gen. Ed. Domain I-A)

An application of the principles of speech, language, and nonverbal techniques in oral communication in front of audiences. Students study and practice various organizational patterns and genres of public speaking. The course incorporates written self-critiques and peer critiques, and may include video recording of oral presentations for analysis.

## COMM 115 Human Communication (Gen. Ed. Domain III-B)

An introduction to the theories, models, and contexts of the study human of communication. Students explore elements of the basic communication model (communicator, message, and medium) and the various contexts in which communication dynamics occur (perceptions of self, relationships, groups, and the public sphere). Emphasis is placed on the intersection of verbal and nonverbal messages in face-to-face communication and how cultural norms inform, and are informed by, human communication. Special attention is given to developing an awareness of ethics and social responsibility in human communication.

## COMM 130 Visual Communication (Gen. Ed. Domain I-B)

An introduction to ways visual media are used as communication tools in contemporary society. Students are introduced to design fundamentals, graphic illustrations, photography, typography, political cartoons, advertisements, and multimedia both in print and on screen. Daily newspapers, weekly magazines, museum collections, and the Internet are used as the primary text.

## COMM 145 The Creative Process

An examination and exploration of the development of an individual's creative process, particularly as it relates to in- person and mediated performance. Students identify and critically reflect on their own creative processes in order to cultivate skills and habits for lifelong creativity. Emphasizing creation as a process rather than a product, this course encourages students to explore a variety of forms as outlets for their creativity. Lectures, colloquia, and projects - both large and small - are used to develop students' ability to reflect on and continuously refine their own unique creative powers. Note: Credit will not be given for both this course and COMM 269 Creative Process: Inspiration and Sweat.

## COMM 180 Introduction to Theatre Studies (Gen. Ed. Domain III-B)

An introduction to the art, craft, and socio-psychological dimensions of theatre throughout history from around the globe. Assigned play readings are combined with the study of the collaborative art of theatre from the varied perspectives of playwright, director, designer, technician, actor, critic, and informed audience. This course is suitable for students from a variety of majors who are seeking a basic knowledge of theater.

## COMM 201 Oral Interpretation of Literature (Gen. Ed. Domain I-B)

A study of literature as a speech art emphasizing the reader's response to the meaning of the spoken word within different literary works, practice in and evaluation of reading aloud, storytelling, and choral speaking. Selections from prose, fiction, and drama are studied.

## COMM 202 Global Media (Gen. Ed. Domain III-C)

A survey of global media texts, from clothes to movies, commercials, news, music videos and social media. Looking mainly at texts from outside the United States, students acquire a deeper understanding of the significance of cultural difference, of how politics and technology shape culture, and of the human dimension of globalization. Students examine the interplay between the oppressive and liberating potentials of media technologies. NOTE: Students cannot receive credit for both this course and COMM 255 Special Topics in Communication Arts: Media Globalization.

## COMM 205 Small Group Communication

An exploration of the theories, concepts and skills that improve speech communication in group contexts. Leadership and group skills are developed through practical application (group work) aimed at accomplishing shared tasks and facilitating positive interaction. Students study the principles of group dynamics, decision-making, problem solving, interpersonal conflict, consensus, leadership and team building. The course incorporates elements of conflict management and also emphasizes issues relevant to membership diversity. Students have the opportunity to evaluate group members' interactions critically and constructively.
Prerequisite: COMM 115 Human Communication or COMM 107 Effective Speaking, or permission of the instructor.

## COMM 206 Experimental Film Production

A hands-on introduction to the production of experimental films. Working independently and occasionally in teams, students create short-form experimental films which may include or combine live-action, still images, and/or found footage. The course includes lectures, assigned readings, screenings and critiques of a radically diverse selection of works from the avant-garde and experimental cinema; works that delve in subject matter such as eroticism, narrativity, collage, abstraction, and self-reflection. Students critically assess these works and apply one or more of the visionary aesthetics into an original film of their own design. Course meets for six (6) hours per week. NOTE: Students use High Definition (HD) cameras with video capture abilities.

## COMM 207 Interpersonal Dialogue (Gen. Ed. Domain III-B)

An introduction to interpersonal communication. While it does not offer a formula for interpersonal success, this course invites the student to ask questions about the primary issue of the "other" and how the "other" necessarily affects the "self." In so doing, the course centers on issues such as selfawareness, self-disclosure, nonverbal communication, listening, authenticity, power, and conflict. Students study the ways in which speech communication processes both disintegrate and nurture the dyadic human relationship.

## COMM 209 Audio Production: Podcasting

An introduction to the diverse world of podcasts and podcast production. Students research existing podcasts for genre, content, hosting styles, and means of dissemination. Using both studio-based and location digital audio recording equipment and techniques, individuals and small groups work to develop original show concepts and content. Professional audio post-production software is used to assemble and author the shows. Students post and market their original podcasts.

## COMM 213 Advanced Effective Speaking

An application of the principles of speech and language in the delivery of speeches to larger audiences. The class emphasizes organizational techniques, language adaptation, audience analysis, and clarity of expression. Students learn the distinctions between preparation and practice of the four major categories of public discourse: informative, deliberative, forensic, and epideictic. Oratory skill, confidence, and fluency in speech are primary focal points of this course.
Prerequisite: COMM 107 Effective Speaking or COMM 115 Human Communication; or permission of instructor.

## COMM 214 Introduction to Acting (Gen. Ed. Domain I-A)

An exploration of the fundamentals of the craft of acting, introducing students to the techniques that awaken the creative mind, body, and spirit of the actor. This course is designed to offer hands-on experience in the fundamentals of acting. Students have the opportunity to explore a variety of texts and develop confidence in their performance skills through group exercises designed to free emotional spontaneity and creativity. Students analyze, memorize, rehearse, and perform scenes from plays. Note: Students cannot receive credit for both this course and COMM 314 Acting.

## COMM 215 Science Communication

An applied study of the oral and visual communication techniques needed to present scientific concepts to a public audience. In both individual and group presentations about scientific news and controversy, students build practical skills in delivery, language clarity, audience adaptation, and the use of multimedia. Science-based issues concerning the public sphere may include the environment and climate change, ocean health, the shortage of natural resources, access to water, energy resources, information and health technologies, pandemics and biosecurity, public health, food safety, STEM education, space exploration, defense technologies, and the Internet.
Prerequisite: ENWR 110 Composition II.

## COMM 220 Mass Communication

An overview of the development of media technologies, industries, and institutions. Students examine the development of various media and the interaction between technology and culture throughout history. Emphasis is on the modern media age from the 19th century to the present.

## COMM 224 Voice and Movement

An introduction to two fundamental aspects of performance: voice and movement. Students are required to actively participate in physical and vocal exercises to establish a relaxed unrestricted body and free voice that is open and available to impulses. Students also read texts and engage in discussions and written exercises.

## COMM 226 Writing for Visual Media (Gen. Ed. Domain I-A)

A study and practice of writing for all forms of digital and electronic mass communication. Students study various approaches to, and formats and techniques for, writing for the Internet, broadcast news, public and media relations, commercials, comedy, and drama. Using theoretical models and case studies, students develop unique and creative solutions for a variety of "real-world" writing and communication problems.
Prerequisites: ENWR 110 Composition II.

## COMM 231 Advertising Techniques

An examination of the fundamental concepts and techniques of the advertising industry. Emphasis is placed on the study of the history, aesthetics, and practice of advertising, as well as its social aspects.

## COMM 234 Intercultural Communication

An exploration of communication patterns exhibited when individuals and social groups from different cultures and national identities interact. Communication within interpersonal, social, organizational, and political contexts are examined. Attention is directed to the ubiquitous role that culture-specific communication plays in the struggles that cultures endure to preserve their integrity in a world increasingly confounded by globalization. Writing assignments, role-playing exercises, and cultural simulations allow students to consider theories and taxonomies that explain patterns of learned behavior reflected in a culture's symbols, identity politics, and resistance to change.

## COMM 237 Communication and Leadership

An examination of the communication competencies necessary for effective leadership in a variety of societal contexts. Students explore how nonverbal communication, word choice, timing, and context can facilitate or impede the motivation of followers and the inspiration for positive change. Topics include how leadership communication strategies inform a leader's negotiation of power, agency, and trust, with an emphasis on how leadership is developed and maintained by communicative interaction with others.

## COMM 242 Environmental Communication

An introduction to public discourse about environmental destruction in the United States and beyond. The focus is on the role played by images, slogans, and changing communication technologies in mediating discussion and capturing attention. Topics may include the history and development of environmentalism, the articulation of environmental problems with wider social problems, the local and global dimensions of environmental issues, and the challenge of converting scientific consensus into political consensus. Students explore the key institutions, social movements, and interests involved in communication about the environment.

## COMM 250 Media/Society/Self

A study of the role of media institutions and media technologies in contemporary culture. Students examine the interplay of influences among media, society, and individual identity. Media are critically evaluated as vehicles for the production and consumption of culture in the arts, advertising, public relations, politics, news, and popular culture.
Prerequisite: COMM 115 Human Communication or permission of instructor.

## COMM 255C/255M/255P/255T Special Topics in Communication, Media, and Performance

An in-depth examination of a topic in communication, media, or performance with particular emphasis on the contributions of recent research or disciplinary innovations and modifications. Each student completes an assigned project. Topic and instructor are announced in advance. This course, on a different topic, may be repeated for credit.

## COMM 259 African Americans in Television and Radio (Gen. Ed. Domain I-B)

An overview of the historical and contemporary representation of African Americans in television and radio. Through selected readings, individual and group papers, presentations, class discussions, and debates, students explore issues surrounding the multiple representations of race and gender in commercial and non-commercial radio and television. The course focuses on the connections between media history, American culture and the underlying socio-political impetus for the (mis)representation of Black gender roles in broadcast and streaming media.

## COMM 262 Television Studio Production (Gen. Ed. Domain I-A)

An introduction to the basic technologies, theories and production practices of studio-based multicamera television programming. Through a variety of creative, team-based hands-on projects and indepth critiques, students develop fundamental skills in all phases of television studio production. In addition to the operational techniques of video and audio production specific to television, the students gain experience in concept creation, script writing, acting, producing, directing and editing. Student research augments lectures and demonstrations on the aesthetics, ethics and methodological requirements of communicating ideas, information and cultural values via television programming. Note: Students cannot receive credit for both this course and COMM 262 Studio Production I.

## COMM 264B Theatre Production - Backstage

A hands-on practical experience in playmaking and production. Students are expected to spend 80 or more hours per semester working on a production at the university. Students work backstage to bring a production to fruition. Audition is required for performance roles. Students may earn two (2) course credits in succession by arrangement with instructor and chair. Note: A student may take the course a second time with the permission of the instructor provided that the student's responsibility in the production is significantly different.

## COMM 2640 Theatre Production - Onstage

A hands-on practical experience in playmaking and production. Students are expected to spend 80 or more hours per semester working on a production at the university. Students work onstage to bring a production to fruition. Audition is required for performance roles. Students may earn two (2) course credits in succession by arrangement with instructor and chair. Note: A student may take the course a second time with the permission of the instructor provided that the student's responsibility in the production is significantly different.

## COMM 275 Public Relations

A survey of the function and practice of public relations. The course considers the history, concepts, research methods, and production processes of the industry. Specific examples and cases are studied in detail, and students create and develop their own public relations presentations. Prerequisite: COMM 115 Human Communication, or permission of the instructor.

## COMM 280 Introduction to Film Production (Gen. Ed. Domain I-A)

An introduction to the basic technologies, theories and production practices of single-camera, "short subject" location filmmaking. Students write scripts, choose shots, direct actors and use a variety of devices and techniques to record motion picture and audio elements. Projects are edited using professional computer software and all student works are screened and critiqued by the class. A significant hands-on laboratory component is augmented by in-depth lectures and discussions that explore film aesthetics, design and the cultural-historical context of film as a communication medium. Possible field trips and guest lecturers may further enhance the learning opportunities. Note: Students may not receive credit for this course and COMM 266 Field Production I.

## COMM 297 Communication and Social Media

An exploration of social media and its impact on modern communication. Students consider how social media has impacted the way we communicate and interact. Students explore various modes of communication delivery on social media including word, image, and video. Through class assignments students create communication plans and determine best practices to achieve a dynamic social media presence. Students examine rights management, copyright, and curating techniques as they affect social media content and use.

## COMM 303 Organizational Communication

An advanced study of the role that communication plays in the emergence, maintenance, and deterioration of organizations. Students examine theories and contemporary research to explore how strategies of communication operate for organizations to function effectively. By analyzing organizational leadership, teamwork, goals, conflict management, diversity, and technological practices, students learn how communication constitutes an organization's culture and climate. The course addresses various contexts of organizations including but not limited to corporate, governmental, non-governmental, political, international, not-for-profit, and educational institutions. Emphasis is placed on the application of organizational communication concepts to case studies. Note: Students cannot receive credit for both this course and COMM 230 Organizational Communication.
Prerequisite: COMM 115 Human Communication or permission of instructor.

## COMM 308 Media Criticism: Principles and Practice

An advanced course which explores in social, ethical, and aesthetic terms what it means to take a critical stance toward a variety of media texts. While a number of critical perspectives and schools of thought are examined and compared, the course's ultimate objective is the development and articulation of each student's personal standards concerning quality and value. Careful reading, watching, and writing is required, along with active classroom participation.
Prerequisite: COMM 250 Media/Society/Self or permission of instructor.

## COMM 309 Video Editing and Effects

An exploration of the tools, techniques and theories associated with the disciplines of motion picture editing and special effects creation. Executing numerous hands-on exercises and projects, students gain experience using professional computer software to communicate thoughts, feelings, and information through the arrangement and manipulation of visual and auditory elements. Students also practice the generation of special visual effects, from the subtle to the fantastical. Instructor presentations, demonstrations, film screenings, readings and student-guided assignment critiques further lead the students to a comprehensive understanding of the importance of pacing and juxtaposition in motion picture storytelling.
Prerequisite: COMM 280 Introduction to Film Production or permission of the instructor.

## COMM 312 Screenwriting

An advanced course that examines the craft and the business of screenwriting. The course explores the theoretical and the practical perspectives involved in creating, developing, and marketing scripts based on original ideas or those adapted from existing stories. Students study classic as well as modern approaches to the process of writing for feature-length as well as short film. Guest lecturers, screenings, group discussions and critiques, along with selected readings supplement the learning process as students progress toward completion of semester-long writing projects. Note: Students cannot receive credit for this course and COMM 312 Screen and Teleplay Writing.
Prerequisite: COMM 226 Writing for Visual Media or permission of the instructor.

## COMM 317 Video Production: Vlogging

An exploration of the communication theories, digital tools, and common practices associated with the production, on-demand distribution, and promotion of short-form internet videos commonly referred to as vlogs. Through research and analysis of existing genres, styles, trends, personalities, and content, students examine essential factors inherent to effective messaging in the medium for both personal and professional applications. Active engagement in hands-on content creation, branding, marketing, and channel management allows students to generate a sizable portfolio of creative works designed to inform, influence, and entertain a mass audience. Note: Students are encouraged to acquire their own recording and editing technologies for this course.
Prerequisite: One (1) 200-level media production course or permission of instructor.

## COMM 322 Persuasion and Social Influence

An advanced study of how people influence each other through speech and symbolic gestures. Students evaluate the strategies used to change others' beliefs, attitudes, values and actions. The course prepares students to set persuasive goals for a variety of situations and audiences, generate motivational and logical appeals, and evaluate persuasive messages in the broader culture. Themes include democratic persuasion, the challenge of diversity, and social hierarchy. Controversial topics are selected to reflect persuasive discourses in a pluralistic society. Other issues investigated include methods through which one resists another's attempts to persuade, the distinctions between choice and coercion, and the ways verbal aggression may facilitate or disable persuasion. Fear appeals, propaganda, and compliance-gaining techniques are other areas critically assessed.
Prerequisites: ENWR 110 Composition II and General Education Domain III-B or III-C, or permission of the instructor.

## COMM 324 Rhetoric and Popular Culture

An exploration of the rhetorical dimensions of popular culture with the premise that rhetoric can be defined as intentional or unintentional persuasion. Students analyze how language and other symbols that are pervasive in popular music, advertising, television programming, popular novels, films, magazines, websites, and social media operate to promote ideologies and cultural values that are often contradictory to accepted societal norms. Emphasis is placed on the rational, aesthetic, and emotional appeals of popular culture artifacts. Through readings, class discussions, and course assignments, students gain an understanding of how the consumption of what is thought of as mere entertainment functions to orient individuals to a particular understanding of reality. Note: Students cannot receive credit for both this course and COMM 370 Rhetorical Tradition.
Prerequisite: COMM 250 Media/Society/Self or permission of the instructor.

## COMM 328 Argumentation and Advocacy

An introduction to the nature of argument and critical thinking, including methods of analysis, research, critical evaluation of reasoning and evidence, refutation, debate and advocacy. Students learn how to think about their positions critically, plan their communicative strategies effectively, and argue their cases forcefully. The course surveys the study of reasoning, evidence, case construction and effective presentation in bringing about belief and conviction. These concepts are explored in detail, often by applying them to various elements of the public sphere and considering various social and political questions.
Prerequisites: ENWR 110 Composition II and General Education Domain III-B or III-C, or permission of the instructor.

## COMM 364 Aspects of Theatre

A study of selected technical and performance aspects in theatre. This course explores discrete topics in theatre. Topics may include set design, puppetry, digital media and theatre, storytelling, stage makeup, and acting Shakespeare. Specific content varies by semester. NOTE: This course may be taken more than once for credit, provided a different topic is being examined.
Prerequisite: One 100- or 200- level COMM course or permission of instructor.

## COMM 366 Documentary Filmmaking

An advanced course that engages students in the production of non-fiction film. Students examine the history, theories, and practices of non-fiction storytelling, while studying the aesthetics, ethics, and other practical considerations inherent in the medium. Lectures and critiques encourage the analysis of non-fiction storytelling's place in today's society. Working in teams, students conceive an original idea and demonstrate competence by organizing and creating a non-fiction film. Additional emphasis is placed on the role of research, marketing, and distribution of these films. Demonstrations, guest lectures, field trips, screenings, and discussions supplement the study of this genre. Note: Students cannot receive credit for both this course and COMM 366 Field Production II. Prerequisite: COMM 280 Introduction to Film Production or permission of the instructor.

## COMM 375 Strategic Communication

An introduction to systematic planning and implementation of deliberate communication messages through both traditional and new media. Students explore procedures, tactics, and persuasive techniques in corporate, non-profit, political, health, and agency settings. Students practice approaches to understanding the frameworks that underlie efficient and meaningful communication through theoretical perspectives, case studies, and hands-on experiences, from inception, through execution, to analysis.
Prerequisite: ENWR 110 Composition II.

## COMM 380 Advanced Film Production

An advanced study of production practices, technologies, and theories associated with the planning and creation of motion pictures. Students explore and execute advanced techniques while producing a variety of individual and group film projects which may incorporate animation, effects, sound design, motion graphics, photography and either documentary, experimental or narrative storytelling elements. The hands-on, production-oriented learning experience is supplemented with methodology-based research, lectures, demonstrations and possible field trips and guest lecturers. All student works are screened and critiqued by the class.
Prerequisite: COMM 280 Introduction to Film Production or permission of the instructor.

## COMM 410 Senior Portfolio in Film Production

The capstone course for students interested in moving image studies in the Integrated Visual Media concentration that offers students the opportunity to complete specialized projects and build and develop material for a professional portfolio while exploring advanced learning experiences and techniques. The course covers a variety of critical theories and affords students the opportunity to further develop their conceptual and pragmatic skills in motion image studies. Students work on production projects that are collaborative in nature, culminating in an end-of-the-semester screening or exhibit. Note: Students cannot receive credit for this course and COMM 410 Senior Portfolio in Production.
Prerequisite: This course is open only students with senior status in the Integrated Visual Media concentration of Communication Arts.

## COMM 414 Scene Study

An advanced study in scene structure and acting techniques. Through the exploration of challenging scenes, students continue their study of acting to find the appropriate method for their own practice. Methods studied may include Stanislavski, Meisner, and Laban.
Prerequisite: COMM 214 Introduction to Acting or permission of instructor.

## COMM 450 Seminar in Communication, Media, and Performance

A capstone course that offers students an opportunity to synthesize and apply knowledge and skills gained throughout their communication arts major coursework. Through readings, assignments, inclass activities, and the completion of individual and/or group projects, students develop an understanding of how the collective experiences in their respective concentrations apply to their future roles as responsible citizens, employees, and employers. Class activities and assignments address the ethical, social, and political implications of being a communication practitioner in the 21st century. Note: Open to Communication Arts majors only.
Prerequisites: COMM 250 Media/Society/Self and senior standing; or permission of instructor.

## COMM 490 Independent Study in Communication, Media, and Performance

An opportunity for students to engage in an in-depth study outside of the department's existing curriculum. A written proposal must be submitted to the faculty member who has agreed to be the supervising instructor. The student must investigate research and participate in weekly conferences with the supervising faculty member. A final project must be submitted to the supervising faculty.
Note: Open to Communication Arts majors only.
Prerequisites: Junior standing, a 3.00 GPA or above in the Communication Arts courses, and permission of the supervising instructor and the department chair.

## COMM 495 Internship in Communication, Media, and Performance

An internship (minimum 140 hours) in a local business, industry or organization pertinent to the student's area of specialization. Students may earn up to three (3) internship course-credits, completed during at least two semesters. (Students may take a two (2) course-credit internship, consisting of 280 hours of service in one semester.) Note: Open to Communication Arts majors only.
Prerequisites: Junior standing and permission of instructor. Two (2) 200-level courses in the Communication Arts major.

## COMPUTER SCIENCE COURSES

## CSCI 108 HTML, JavaScript Programming, and Web Site Development (Gen. Ed.

## Domain I-A)

An introduction to various features of HTML and JavaScript languages such as tags, images, buttons, forms, and animation files. Students learn to program using these languages to create interactive Web pages. Students create a complete Web site using various tools including a browser and image editor.

## CSCI 111 Computational Thinking: Building Robots and Games (Gen. Ed. Domain II-A)

An introduction to computational thinking with emphasis on problem solving. Students practice logical thinking through robot programming and game development. This is a learn-by-doing course in which students engage in the computational thinking process through hands-on experience. Students program robots to perform activities such as navigating mazes and playing soccer and develop a variety of games similar to Minecraft(r) and racing simulations. This course is appropriate for students with little or no programming experience.

## CSCI 120 Introduction to Information Technology (Gen. Ed. Domain II-A)

An overview of computer concepts and Information Technology (IT). Applications of IT in various disciplines are illustrated and the role of information technology in contemporary society, including issues of intellectual property, ethics, privacy and security is discussed. Students are introduced to windowed environments, file management, problem-solving tools and a high-level programming language. Advanced concepts of word processing, spreadsheets, and presentation software required for effective communication, analysis, and design are explored. Note: Students cannot receive credit for both this course and 63.151 Personal Computer (PC) Fundamentals and Applications.

## CSCI 130 Computer Science I Using Java (Gen. Ed. Domain II-A)

An introduction to the general concepts of computer programming and problem-solving through practical hands-on experience using the Java programming language. Topics include: the basics of computer hardware and software; an introduction to the Java program-development environment and the Java Virtual Machine (JVM); problem-solving techniques for programming; development of algorithms, number systems, data types, and operators; input - output operations; program control structures including loops, methods (functions), and arrays; an introduction to object-oriented programming; and designing, implementing, compiling, testing, and debugging programs. Laboratory periods provide hands-on experience using programming exercises that include implementing designed algorithms as well as compiling, testing, and debugging programs. Laboratory ( $\mathbf{2}$ hours). Note: Students cannot receive credit for both this course and CSCI 152 Computer Science I Using Java.
Corequisite: MATH 123 Introduction to Functions or minimum score of 4 on the math placement examination.
Prerequisite: CSCI 120 Introduction to Information Technology or permission of instructor.

## CSCI 135 Information Technology and Society (Gen. Ed. Domain III-B)

An exploration of the impact of computing and information technology (IT) on individuals and society in the United States and the world. The course addresses the impact of IT on areas such as: digital technology at home; personal devices; rapid unregulated spread of (mis)information; political processes of dissemination and polling capabilities; empowering individuals and families with information included in medical and other databases; personal and work place communication; the networked information economy and globalization. Other topics may include the interaction of IT with intellectual property, privacy, ethics, security concerns and freedom of expression.
CSCI 138 Information Technology and the Environment (Gen. Ed. Domain III-C)
A study of how information technologies can support and affect a clean and sustainable environment. Technologies such as virtualization, data centers, cloud computing, smart grid, tracking, imaging, simulation, document management, sensors, analog/digital devices, telecommuting, and teleconferencing are discussed. Use of social network groups to increase awareness and to mobilize action on environmental issues is addressed. The use of these information technologies in the United States is considered through the examination of geographically distributed resources such as water, glaciers, forests, species, and renewable wind and solar energies. The environmental impact of social consumption, recycling, and improper disposal of IT systems is addressed. The impact of technological forces in the United States on global environment is examined. Note: Computer Science majors may take this course as a free elective.

## CSCI 140 Introduction to the Internet, Graphics, and Multimedia

## (Gen. Ed. Domain I-A)

An introductory course exploring fundamental concepts, vocabularies, and techniques related to graphic design, digital cameras, photo editing, scanning, web design, interactive design, animation and multimedia using a variety of software programs. Students gain a broad foundation that can be applied to more advanced concepts and skills in the Information Technology discipline. NOTE: Students cannot receive credit for both this course and either COMM 140 Introduction to the Internet, Graphics, and Multimedia.

## CSCI 156 Python Programming for Applications

An introduction to computational problem-solving using Python, open to all majors, with an emphasis on moving, storing, searching and discovering patterns in numeric, textual, or visual data sets. Introductory topics include installing the necessary software, establishing and using online resources for retrieving and submitting assignments, and creating online repositories. Additional topics focus on the basic structure of Python programing including variable types, control flow, functions, use of public libraries and extensions, and how to write efficient, modular code to solve real-world problems.

## CSCI 200 Computer Science Professional Exploration Seminar ( 0.5 course-credit)

A required seminar for all computer science majors to prepare them for their future careers. Topics include professional ethics, organizational issues, strategic interviewing techniques, industry research, team roles, oral and written communication skills, as well as other topics relevant to an effective job search and a positive work experience. Students begin developing their portfolios, a focused resume, and a succinct career objective. Students also identify their strengths, weaknesses and career interests in order to maximize the potential of a cooperative education experience, internship, or post-baccalaureate position. This course must be completed prior to participation in a cooperative or internship experience. This course may be waived with one (1) or more years of fulltime relevant professional industry experience at the discretion of the department chair. NOTE: Open to Computer Science majors only.
Prerequisite: Sophomore standing.

## CSCI 215 Computer Science II Using Java

An intermediate programming course that emphasizes debugging, documentation, and modular and object-oriented design with tools such as the Unified Modeling Language. Topics include eventdriven programming, string and array manipulation, sorting and searching, file operations, dynamic memory allocation, inheritance, polymorphism, and exception handling.
Prerequisites: CSCI 130 Computer Science I Using Java with a minimum grade of C- (1.70) and either MATH 180 Precalculus or QUAN 201 Quantitative Modeling for Business and Economics (may be taken concurrently); or permission of instructor.

## CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {TM }}$

An introduction to the basics of networking and operating systems. Topics include the evolution and overview of operating systems, operating system principles, interfaces (GUI, command line, and API), command processors and utilities, file systems, access control, processes, programming and scripting, user accounts and authentication, OSI model, Internet Protocol, networking utilities, net computing, client-server model, FTP, and network file systems. The UNIX ${ }^{\text {TM }}$ operating system is used as a primary reference for illustration and hands-on experience.
Prerequisite: CSCI 130 Computer Science I Using Java.

## CSCI 271 Data Structures

An in-depth presentation of recursion, collections and iterators, fundamental techniques in graphics, and threading. Students implement linked lists, stacks, queues, trees, heaps, graphs, hash tables and related algorithms. Students implement a significant programming project.
Prerequisites: CSCI 215 Computer Science II Using Java with a minimum grade of C- (1.70) and MATH 180 Precalculus.

## CSCI 300 Artificial Intelligence

An introduction to cognitive science and efforts to implement intelligence in computer hardware and software, with application areas. Topics include search, knowledge representation, reasoning, uncertainty, learning, embodied interaction, future prospects, and philosophical considerations. Concepts are demonstrated with software.
Prerequisites: CSCI 130 Computer Science I using Java or CSCI 156 Python Programming for Applications, and MATH 206 Discrete Mathematics I.

## CSCI 308 Python Programming

A study of basic and advanced computer programming features using Python programming language. Topics include control structures, functions, data structures, object-based programming, exception handling, string manipulation, file processing and serialization, graphical user interfaces, web programming, database API, concurrency control, and networking.
Prerequisite: CSCI 215 Computer Science II Using Java or permission of instructor.

## CSCI 310 Computer Science Cooperative Experience I (3 course-credits)

A supervised practical experience in a public or private organization appropriate to the student's program of study that expands the student's ability to think and develop professionally within the discipline. The cooperative experience is offered in collaboration with participating institutions that provide experience and professional guidance for the student. The student works full-time over a sixmonth period. The cooperative experience requires written documentation and critical reflection of the student's experiences. Student performance is evaluated by the industry supervisor and reported to the cooperative experience coordinator who assigns a grade. Note: This course cannot be used as a 300-level elective for the Concentration in Computer Science or the Concentration in Information Systems.
Prerequisites: Completion of CSCI 200 Computer Science Professional Exploration Seminar with a minimum grade of C- (1.70) and permission of department chair. Open to students in Computer Science Concentration with Cooperative Experience and Information Systems Concentration with Cooperative Experience only.

## CSCI 317 Discrete Structures

An intermediate to advanced course on discrete mathematical structures used in computer science. Students study abstract structures used to represent discrete objects and the relationships between these objects. Topics include principles of logic, incompleteness, diagonal proof, inductive proof, t and correctness of simple algorithms. Coverage of set theory extends to relations, graphs, functions, countability, formal languages, and non-well-foundedness. Students write recurrences to define computable functions and explore discrete probability and randomness from a computational viewpoint.
Prerequisites: CSCI 271 Data Structures and either MATH 206 Discrete Mathematics I or MATH 215 Finite Mathematics.

## CSCI 320 Windows Server \& Client Management

Designed to teach students how to plan, set up, and configure Windows server and client workstations with TCP/IP enterprise protocol; monitor and control security within the systems network; administer user accounts, system disks, file system, mail, print and remote access services; and recover from server failures.
Prerequisite: CSCI 215 Computer Science II Using Java.

## CSCI 333 Object-Oriented Programming Using C++

A presentation of advanced features of programming with an emphasis on class construction and object-oriented design and programming. Topics covered include namespaces, encapsulation, function and operator overloading, templates, collection classes, containers, iterators, inheritance, polymorphism, and exception handling. Course touches on Standard Template Libraries (STL). NOTE: Students may not receive credit for both CSCI 333 Object -Oriented Programming Using C++ and 63.259 Object-Oriented Programing Using C++.
Prerequisite: CSCI 215 Computer Science II Using Java.

## CSCI 336 C\#.NET and ASP.NET Programming

An introduction to Microsoft .NET framework and development of web applications using C\#.NET and ASP.NET programming. Topics include the .NET framework architecture, ActiveX Data Objects (ADO.NET), C\#.NET basics and object-oriented programming, ASP.NET web forms, web controls, data controls, state management, master pages, themes and skins, web user controls, Internet Information Server (IIS) and deployment, and ASP.NET page life cycle.
Prerequisite: CSCI 215 Computer Science II Using Java.

## CSCI 340 UNIX ${ }^{\text {TM }}$ System Administration

A comprehensive coverage of UNIX ${ }^{\mathrm{TM}}$ system administration and management. Topics include system setup, booting and shutdown, management of user accounts, file systems, disk management and serial device management, backup and restore, print and network configuration, security, system logs, performance monitoring, and maintenance.
Prerequisite: CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {TM }}$.

## CSCI 345 Computer \& Network Security

A detailed study of the concepts and principles of computer and network security. Topics may include: physical and organizational security, cryptography, public key infrastructure, system and services security, networking fundamentals and protocols, worms and viruses, attacks, prevention, detection and recovery, law, ethics, and privacy. The Windows and UNIX operating systems are used for illustrations.
Prerequisite: CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {™ }}$.

## CSCI 347 Analysis of Algorithms

A presentation of asymptotic time and space complexity of sequential and parallel algorithms, using big-O and related notation. Complexity classes P and NP (tractable and intractable problems) and verification of algorithms by formal methods are also discussed.
Prerequisites: CSCI 271 Data Structures with a minimum grade of C- (1.70) and either MATH 206 Discrete Mathematics I or MATH 215 Finite Mathematics.

## CSCI 352 Computer Architecture and Assembly Language

An introduction to digital logic components, their organization in computer systems, and assembly language programming. Topics include gates and flip-flops, register transfer, and CPU design; memory organization, I/O interfaces, and the interrupt system; representation of data, addressing modes, CPU instructions and pseudo-instructions, assembly language, and the organization of low-level software to control the computer.
Prerequisite: CSCI 271 Data Structures with a minimum grade of C- (1.70).

## CSCI 360 Database Management

A comprehensive coverage of database concepts, design, and implementation. Topics include systems analysis, data modeling, relational databases, logical design, normalization, user interfaces, query processing including SQL, database administration, security, backup and restore, and performance evaluation. Popular databases are referenced. Note: Students cannot receive credit for both CSCI 360 Database Management and CSCI 467 Data Base Management Systems. Prerequisite: CSCI 130 Computer Science I Using Java.

## CSCI 362 Software Engineering

Principles of systematic program design and implementation. Structured programming and top-down segmented program development. Stepwise program development. Chief Programmer Team, HIPO, and other programming techniques. Decision tables. Program correctness and verification. Software reliability.
Prerequisite: Completion of CSCI 271 Data Structures with a minimum grade of C- (1.70).

## CSCI 373 Advanced Web Technologies

An introduction to dynamic database-driven Web site development. Students learn about client- and-server-side scripting, maintaining persistent information on the Web, and user-interface design concepts.
Prerequisites: CSCI 108 HTML, Java-Script Programming, and Web Site Development; and CSCI 360 Database Management.

## CSCI 376 Networking Technologies

An introduction to net-centric computing, communication and networking, network security, network management, client-server computing, wireless and mobile computing, and network applications. Various LAN and WAN networking technologies such as Ethernet, Token Ring, wireless network, virtual private network, personal area network, Storage Area Network, Internet, ATM, telecommunication networks, multimedia data technologies, and internetworking are covered. Business aspects of computer networks are also covered. Note: Students cannot receive credit for both this course and 63.476 Networking Technologies or CSCI 477 Computer Networking.
Prerequisite: CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\mathrm{TM}}$.

## CSCI 400 Special Topics in Computer Science

A study of a selected topic in computer science to be given from time to time at the discretion of the Department. Topics presented here are on a one-time-only basis and are not a permanent part of the curriculum.
Prerequisite: Computer Science major, Junior standing, or permission of the instructor.

## CSCI 410 Computer Science Cooperative Experience II (3 Course-credits)

A second supervised practical experience in a public or private organization appropriate to the student's program of study that expands the student's ability to think and develop professionally within the discipline. The cooperative experience is offered in collaboration with participating institutions that provide experience and professional guidance for the student. The student works full-time over a six-month period. The cooperative experience requires written documentation and critical reflection of the student's experiences. Student performance is evaluated by the industry supervisor and reported to the cooperative experience coordinator who assigns a grade. Note: This course cannot be used as a 400-level elective for the Concentration in Computer Science or the Concentration in Information Systems.
Prerequisites: Open to students in Computer Science Concentration with Cooperative Experience and Information Systems Concentration with Cooperative Experience only.

## CSCI 460 Theory of Computing

A proof-based introduction to theoretical computer science and some key applications. Models of computation, including circuits, finite automata, pushdown automata, Turing machines and randomaccess machines are examined as well as specification of formal languages. Theoretical concepts are applied to programming-language translation. The course includes concepts of interactive, parallel and concurrent computation.
Prerequisites: Senior status; CSCI 317 Discrete Structures.

## CSCI 465 Operating Systems Internals

An in-depth coverage of operating system principles and internals such as processes, threads, CPU scheduling, concurrency and process synchronization, deadlock, inter-process communication, memory management, virtual memory, file systems, I/O systems, distributed systems, and protection and security. Several of the concepts are implemented through one or more programming projects. Prerequisites: Senior status; CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {TM }}$, CSCI 352 Computer Architecture and Assembly Language, and CSCI 362 Software Engineering.

## CSCI 477 Computer Networking

An introduction to the seven layers of the OSI model. General topics include network topologies; introduction to Local Area Networks, such as Ethernet, Token Ring, and FDDI, and internet-working. Special topics include TCP/IP and FTP protocols, socket interface, Remote Procedure Call (RPC), and client-server architecture. Note: Students cannot receive credit for both this course and CSCI 376 Networking Technologies.
Prerequisite: CSCI 271 Data Structures or equivalent computer industry experience including strong programming skills in C or an object-oriented language or permission of instructor.

## CSCI 490 Independent Study in Computer Science

An exploration of an advanced topic in computer science through a research project conducted under the direction of a faculty member. Students should make arrangements with the faculty member who is to direct their work one semester in advance of the work.
Prerequisite: Junior status.

## CSCI 495 Internship in Computer Science ( 1 to 2 course-credits)

A supervised practical experience in a public or private organization appropriate to the student's program of study. The internship requires written documentation of the student's experiences and a research project or critical evaluation of the experience. Students may earn up to two (2) coursecredits in one semester (a minimum of 8 hours per week for 15 weeks is required for a total of 120 hours for each course-credit. The internship is not intended to satisfy or substitute for any of the courses required for the major. NOTE: This course may be taken for a maximum combined total of four (4) course-credits. Each internship must provide a unique experience. Open to Computer Science majors only.
Prerequisite: Permission of Department Chair.

## CRIMINOLOGY COURSES

## CRIM 120 The Fight for Social Justice: Institutional Battlegrounds

(Gen. Ed. Domain III-B)
An exploration of historic and contemporary battles for social justice as oriented around particular institutions, including but not limited to: the criminal injustice system, education, the labor market, housing, the political realm, the environment, and health/healthcare. An emphasis is placed on the structural forces of oppression and the ways in which the intertwining experiences of race, class, gender, sexuality, age, and ability, both frame and play out in the fight for social justice.

## CRIM 121 Sociological Perspectives on Criminology (Gen. Ed. Domain III-B)

A sociological analysis of the types, causes, and consequences of criminal behavior including street crime, organized crime, and white-collar crime. Emphasis is placed on the links among theory, research, and policy. Note: Students may receive credit for both this course and SOCI 121 Criminology or 52.271 Criminology.

## CRIM 201 White Collar Crime (Gen. Ed. Domain III-B)

An exploration of a wide array of illegal behaviors that people rarely consider when they think of crime. These are crimes often committed by people in positions of power. Students learn about the social, political, and economic causes and consequences of white-collar crime.

## CRIM 211 Crime and Inequality (Gen. Ed. Domain III-B)

An exploration of the relationship of crime and crime control to systems of inequality. Students gain an understanding of race, class, gender, and sexuality as categories of analysis and as structures which influence the life course. The class explores the arguments that scholars and activists have made about how systems of inequality are maintained and reproduced by criminal justice institutions and practices. Additionally, students gain familiarity with explanations for criminological questions.

## CRIM 218 Crime Mapping (Gen. Ed. Domain II-A)

A hands-on introduction to the basics of Geographic Information Systems (GIS) and their applications in the field of criminology. Students use GIS applications to analyze crime data by creating maps that convey the spatial patterns of crime. Students explore strengths and limitations of geographic information for understanding and responding to crime. No prior experience with GIS is required.

## CRIM 222 Global Criminology

An exploration of how globalization is shaping the spread of criminal activity and social control across national borders. Students engage with the forces that explain newly emerging global phenomena including organized crime, transnational policing, the transfer of penal knowledge and policies, human trafficking, and cyber-crime. The course aims to enable students to develop a critical global approach to the study of crime and crime control.

## CRIM 224 Juvenile Delinquency (Gen. Ed. Domain III-B)

An analysis of juvenile conduct and causes of delinquency; police and probation procedures in juvenile cases; and current research and rehabilitation programs in the field of juvenile delinquency with emphasis on the programs in Massachusetts.

## CRIM 233 Victimization and Justice

An examination of the experience of being a victim of harm. This course surveys the impacts of various types of harm on the people who are most directly affected. Emphasis is placed on how social status shapes a person's experiences of both criminal and non-criminal harm and justice. Students engage with the responses to victimization by the criminal-legal system, social welfare agencies, government, and the media.

## CRIM 240 Drugs, Social Control, and the Law (Gen. Ed. Domain III-B)

A critical review of legal efforts to control the trafficking and consumption of drugs. Topics include societal definitions of drugs, socioeconomic conditions that encourage their use and the legal environment of their regulation. Emphasis is on the social and political forces that shape the passage of legislation aimed to limit access to certain drugs, from the Prohibition Movement to the War on Drugs, and the lessons from drug regulation campaigns. The evolution of the societal concept of addiction is examined, from its origins in the religious notion of sin to its more recent framing as a disease.

## CRIM 270 Social Deviance (Gen. Ed. Domain III-B)

An examination of what is involved in the creation of deviant categories and the consequences of being categorized as deviant. A variety of social behaviors and conditions are investigated, including criminalized behavior, illness, or genius.
Note: Students may not receive credit for both this course and SOCI 329 Social Deviance.

## CRIM 290 Topics in Criminology

A study of a selected special subject in criminology to be given from time to time at the discretion of the Department. Topics presented here are on a one-time-only basis. Note: Students may take this course more than once if a on different topic.

## CRIM 301 Criminological Theory

An analysis of major theories that seek to explain crime and delinquency. Students critique and evaluate classic and contemporary criminological theories. Students also apply theories to policy and assess the resulting social consequences.
Prerequisites: Sophomore standing; CRIM 121 Sociological Perspectives on Criminology and one (1) other criminology course. Open to Criminology Majors or Minors Only.

## CRIM 302 Quantitative Methods I - Research Design

The first of two (2) quantitative research methods courses. Students learn to synthesize existing scholarly work in order to write literature reviews that guide students as they design quantitative research projects. The research proposed in this course is completed in the second quantitative research methods course, CRIM 303 Quantitative Methods II - Data Collection \& Analysis. NOTE: Open to Criminology majors only.
Prerequisite: CRIM 301 Criminological Theory or permission of instructor.

## CRIM 303 Quantitative Methods II - Data Collection \& Analysis

A continuation of original research projects developed in CRIM 302 Quantitative Methods I Research Design. Students work in teams to collect and analyze data and present findings in written and oral formats. NOTE: Open to Criminology majors only.
Prerequisite: A grade of C- (1.70) or higher in CRIM 302 Quantitative Methods I - Research Design.

## CRIM 308 Understanding Violence

An examination of diverse forms of violence from a sociological perspective. This course explores the circumstances, rationalizations, patterns, and explanations of violence, and its effects on those who experience it. Students explore concepts to better understand violence as well as methods for confronting, coping with, and preventing it. Topics may include structural violence, state violence, genocide, sexual violence, gendered violence, everyday violence, and the normalization of violence. Prerequisites: ANTH 161 Cultural Anthropology or CRIM 121 Social Perspectives on Criminology or SOCI 101 Introduction to Sociology or SOCI 130 Social Problems; and (1) 200-level ANTH or CRIM or SOCI course.

## CRIM 313 The Culture of Punishment

An examination of the concept of punishment in cultural context. Attention is paid to cultural constructs of punishment throughout history, with special attention paid to our modern-day culture of punishment, including mass incarceration. The course aims to make students aware of the outcomes of modern-day systems of punishment and how these systems interact with structures of social inequality. The course may include an experiential component.
Prerequisite: CRIM 121 Sociological Perspectives on Criminology or SOCI 101 Introduction to Sociology or SOCI 130 Social Problems or ANTH 161 Cultural Anthropology.

## CRIM 321 Intimate Partner Violence

An analysis of the causes and consequences of intimate partner violence. Emphasis is placed on societal and cultural factors. The course considers how intimate partner violence varies by social class, race, ethnicity, gender identity, and sexual orientation. Legal, medical, and social service responses to intimate partner violence are explored.
Prerequisites: A 100-level Criminology or Sociology course.

## CRIM 330 Policing and Society

An examination of the social institution of policing. This course explores its history and evolution, and the theories that propose an understanding of what policing is and how it is located with respect to the state, the law, and society. In turn, the course provides a critical and in-depth analysis of the institution, and develops new perspectives to the institution of policing. Various contemporary issues relating to this institution in the U.S. and around the world are also explored. Such issues may include police use of force, police discretion, corruption, accountability, racial profiling, community policing, surveillance, and new technologies of policing.
Prerequisites: CRIM 121 Sociological Perspectives on Criminology, or SOCI 101 Introduction to Sociology, or SOCI 130 Social Problems, or ANTH 161 Cultural Anthropology, and one additional course at the 200-level in SOCI or CRIM course, or permission of the instructor.

## CRIM 336 Sexual Violence

An examination of the sociological understanding of sexual violence. Students trace the cultural development of definitions of sexual assault, rape, and sexual abuse, as well as the contemporary theories on the causes of sexual violence. Students consider how sexual violence varies by intersecting social positions and identities, which may include the following: social class, occupation, race, ethnicity, gender identity, sexual identity, and citizenship status. Students also analyze the impact that the power dynamics of gender and sexuality have on sexual violence. The course also addresses institutional, criminal-legal, and cultural responses to sexual violence.
Prerequisites: CRIM 121 Sociological Perspectives on Criminology, or SOCI 101 Introduction to Sociology, or SOCI 130 Social Problems, or ANTH 161 Cultural Anthropology; one additional SOCI or CRIM course at the 200-level or above, or permission of the instructor.

## CRIM 360 Media and Crime

An examination of the portrayal of crime, criminals, and punishment in media. Drawing upon structural and cultural perspectives, students analyze various forms of media, including news, television, film, and music, to understand how narratives about crime and criminals are formed, how such narratives impact policy and public opinion, and what such narratives can tell us about ourselves and our relationships to each other. Prerequisites: ANTH 161 Cultural Anthropology or CRIM 121 Sociological Perspectives on Criminology or SOCI 101 Introduction to Sociology or SOCI 130 Social Problems; and (1) 200-level ANTH or CRIM or SOCI course.

## CRIM 400 Topics in Criminology

The study of a selected special subject in criminology to be given from time to time at the discretion of the Department. Topics presented here are on a one-time-only basis.
Prerequisite: Junior status and one (1) ANTH, CRIM or SOCI course; or permission of instructor.

## CRIM 480 Sociology Senior Thesis Seminar

An opportunity for students to expand upon and further develop their research methods project or to initiate a new or related in-depth project. Coursework involves creating and completing a research project that culminates in a major paper for presentation at a departmental student research colloquium. Class meetings involve weekly presentations of work progress, research issues, and new discoveries in the literature and in students' research. NOTE: Open to Criminology majors only. Prerequisites: CRIM 303 Quantitative Methods II - Data Collection \& Analysis and Senior standing.

## CRIM 490 Independent Study in Criminology

An in-depth investigation into a specific topic relating to the student's interest in criminology. The selection of topic is made by the student with written approval of the faculty supervisor. Students are expected to work with a high degree of independence. The student is responsible for securing a faculty supervisor for the course. Course content and projects are determined by the faculty supervisor in consultation with the student.
Prerequisites: Junior status; a 200-level course in Criminology; and permission of instructor.

## CRIM 495 Internship in Criminology

A first-hand exploration of careers related to criminology through the prism of an internship chosen by the student in either a nonprofit, for-profit, or government organization. Students are expected to work at their internship site for a total of 120 hours per semester and to take notes about what they are observing on the job. In class, students discuss readings in order to make sense of their observations and to develop a term paper about some aspect of their internship site. Note: Students may earn up to two (2) internship course-credits, which may be taken during two (2) separate semesters, as long as the content of the experience is substantially different.
Prerequisites: Junior status; two (2) Criminology courses, one of which must be at the 200 level or above; and permission of instructor.

## DATA SCIENCE COURSES

## DASC 490 Independent Study in Data Science and Analytics

A faculty-supervised research or readings course in data science and analytics which offers students the opportunity to investigate a research topic or readings independently. The independent study is only to be approved for research into areas of study that do not duplicate the University's existing curriculum. The faculty supervisor assumes responsibility for coordinating the independent study, evaluating its results, and determining an appropriate grade. The independent study must be approved by the faculty member's home department chair.
Prerequisite: As determined by faculty supervisor.

## DASC 495 Internship in Data Science and Analytics

A supervised study that complements formal course work offered through cooperation with a host partner or institution that provides guidance for the interns. A minimum of 130 on-site hours are necessary to complete the internship and must be verified by the internship supervisor and faculty supervisor. The 130 hours must be completed within one (1) semester. The internship may be taken for a maximum of one (1) course-credit per semester. A student may not enroll in an internship more than twice (two course-credits). The student must submit a written plan for the internship for approval to the department chair, the faculty member's department chair, and the faculty member who serves as internship supervisor. The grade for the internship is determined by the internship supervisor and the on-site supervisor.
Prerequisite: As determined by faculty supervisor.

## DEAF STUDIES COURSES

## DFST 101 Introduction to Deaf Studies (Gen. Ed. Domain III-B)

An introduction to the history, language, and culture of Deaf people. Although Deaf communities are studied at an international level, American Deaf people are the main focus of study. Topics covered include audism, education, literature, politics, communication/assistive technology, biomedical ethics, social justice, and other relevant aspects of the lives of Deaf Americans. This course is taught in American Sign Language with interpretation into spoken English. Prior experience in American Sign Language not expected.

## DFST 201 Introduction to the Interpreting Profession

A survey of the multi-faceted aspects of the interpreting role and profession, including interpersonal communication, cross-cultural communication, language transfer, cultural mediation, the cognitive and physical demands of the interpreting task, professional conduct, ethical decision-making, professionalization and credentialing, and specialty areas of interpreting. Students in the American Sign Language/English Interpreting concentration must pass this course with a minimum grade of C (2.0).

Prerequisites: ASGN 102 American Sign Language II with a minimum grade of C (2.0), and DFST 101 Introduction to Deaf Studies with a minimum grade of $C(2.0)$; or permission of instructor.

## DFST 222 Introduction to American Sign Language Literature

An exploration of the genres and sub-genres of American Sign Language (ASL) literature as captured in the medium of video or on stage. Topics include the definition of ASL literature and its history, storytelling features, folklore, single-authored works, and the status of English-influenced genres and/or sub-genres in relation to ASL-originated works of literature. Students are given opportunities to decipher, analyze, and critique literary works produced by native ASL people in Canada and the United States as well as to create their own poems and stories in ASL. Students in the American Sign Language/English Interpreting concentration must pass the course with a minimum grade of C (2.0). Prerequisite: ASGN 202 Intermediate American Sign Language II with a minimum grade of C (2.0) or permission of instructor.

## DFST 236 Social Justice and the Deaf Community

An exploration of how social justice concepts - difference, power, privilege, positionality, intersectionality, marginalization, discrimination - intersect with the lived experience of people within, and related to, the Deaf community. Students examine how attitudes and structures that prioritize hearing and speech have affected the lives of Deaf people. Students are provided with tools to develop a critical eye with which to recognize injustice and identify ways in which they can respond in alliance with the goals of the Deaf community in their future professional roles. This course is taught in American Sign Language. Students in the American Sign Language/English Interpreting concentration must pass this course with a minimum grade of C (2.0).
Prerequisites: ASGN 102 American Sign Language II with a minimum grade of C (2.0) and DFST 101 Introduction to Deaf Studies with a minimum grade of C (2.0); or permission of instructor.

## DFST 450 Seminar and Externship in Deaf Studies

A capstone course that offers students the experience of working in the field with deaf/hard-of-hearing/deaf-blind individuals in a supervised setting approved by the coordinator of the Deaf Studies Program. Students enhance their receptive and expressive skills in ASL as well as gain experience and knowledge of the diverse Deaf community. Students must complete 50 placement hours and attend a one-and-a-half-hour weekly seminar to discuss issues raised in the field. Placements include educational settings, independent living agencies, and agencies that serve the deaf/hard-of-hearing population/deaf-blind individuals. CORI/SORI checks are required.
Prerequisites: Junior standing and ASGN 302 Advanced American Sign Language II; or permission of instructor.

## DIGITAL HUMANITES COURSES

## DGHM 110 Introduction to Digital Humanities (Gen. Ed. Domain II-A)

A practical introduction to digital humanities, a rapidly expanding field dedicated to exploring humanities topics through users' engagements with technology, multimedia interfaces, and computational methods. Students learn to gather, model, quantify, and visualize humanities data, including text and images, and contribute to a class digital humanities project to gain project management skills in a research-based learning environment.

## DGHM 146 Introduction to Data Analysis in the Humanities (Gen. Ed. Domain II-A)

An introduction to quantitative analysis in the humanities, one of the methodologies scholars use to compile, analyze, and interpret numerical data to answer essential questions in the humanities. This course emphasizes hands-on activities to introduce methods of quantifying evidence garnered from historical and textual sources, compiling and working with data sets, and interpreting and presenting quantitative results in relation to both context and qualitative evidence. Topics addressed vary by semester. NOTE: Students may not receive credit for both this course and HSTY 200 Quantitative History or HSTY 190 Introduction to Historical Data Analysis.
Prerequisite: Mathematics placement code of 2.0 or higher or successful completion of a common core math course.

## DGHM 390 Special Topics in Digital Humanities

An in-depth exploration of theoretical and practical applications of digital humanities as the field evolves. Students explore and recombine technologies that support asking and addressing complex humanities research questions. Students analyze extant projects, tools, and platforms before proposing independent final research projects that have publication potential.
Prerequisites: DGHM 110 Introduction to Digital Humanities or permission of instructor.

## DGHM 495 Internship in Digital Humanities

A supervised practical experience in digital humanities in a professional setting. Students are expected to be involved in activities that draw upon and further develop digital humanities knowledge and skills learned in the minor. A minimum of 160 hours is necessary to complete the internship. All internships must be approved by the student's major department chair, the English Department chair, and the supervising faculty member. Internship in Digital Humanities may be taken for one (1) course-credit only. Note: This course is only available to students minoring in Digital Humanities. Prerequisites: Junior standing, DGHM 390 Special Topics in Digital Humanities, and two (2) elective courses from the Minor in Digital Humanities.

## EARTH SCIENCE COURSES

## EASC 101 Climate Change is Now: An Introduction to Earth Systems

(Gen. Ed. Domain II-B)
An introduction to the causes and consequences of contemporary climate change. Designed for students not majoring in the sciences, the course examines how human actions are fundamentally altering the processes which have shaped Earth's climate over its 4.5 billion-year history. Students consider whether the current generation has a responsibility to leave a habitable climate for the next. They examine the earth system, how that system evolved over time, and how human activities are rapidly changing the climate in which the human species flourished. Students learn how the actions of one generation affect the climate during the lifetimes of subsequent generations.
Prerequisite: Eligibility to enroll in college level math without corequisite remediation, or permission of the instructor.

## EASC 108 Understanding the Weather: Introduction to Meteorology

(Gen. Ed. Domain II-B)
A focus on understanding the basic principles and dynamics of Earth's atmosphere and the phenomenon of weather. Initial topics include the origin and composition of Earth's atmosphere, formation of clouds and precipitation, types of precipitation, global wind patterns, air masses, and frontal systems. Students then examine in detail the formation and causes of the news-making metrological events that shape our daily lives - snowstorms, thunderstorms, tornadoes, hurricanes and how meteorologists forecast these events. Think you can make a better forecast than what you see in the media? Students apply the methods and techniques used in weather forecasting to produce their own weather forecasts. Note: Credit is given for this course only if taken before EASC 208 Principles of Meteorology. Students intending to minor in Earth System Science should take EASC 208 Principles of Meteorology instead.
Prerequisite: Eligibility to enroll in college level math without corequisite remediation, or permission of the instructor.

## EASC 118 Our Blue Planet: An Introduction to Oceanography

(Gen. Ed. Domain II-B)
An introduction to Oceanography - the physical, chemical, geological, and biological processes and characteristics of Earth's oceans. Topics covered include the evolution of ocean basins; the physical and chemical properties of seawater; ocean-atmosphere interactions and cycles; multi-dimensional ocean circulation; and large-scale fluctuations such as tides and waves. This course is designed for all students interested in the oceans and their preservation. Note: Students intending to major or minor in Earth Systems Science should take EASC 228 Principles of Oceanography.
Prerequisite: Eligibility to enroll in college-level math without corequisite remediation, or permission of the instructor.

## EASC 201 Principles of Earth System Science

A comprehensive and quantitative examination of the basic principles and dynamics of the Earth system. The course examines the Earth system, how that system evolved over time, and the system's interactions with human society. Students study the effects of human actions that fundamentally alter the processes that have shaped Earth over its 4.5 billion year history. The course emphasizes how the actions of one generation affect the climate during the lifetimes of subsequent generations and considers the responsibility that each generation must leave a habitable climate for the next. This is an advanced introductory course designed for students majoring in Earth System Science or minoring in Earth System Science and includes extensive quantitative analysis, readings from the primary literature, and a summative research project. Note: Students may not receive credit for EASC 101 Climate Change is Now: An Introduction to Earth Systems after receiving credit for EASC 201 Principles of Earth System Science.
Prerequisite: MATH 123 Introduction to Functions or a satisfactory score on the mathematics placement examination.

## EASC 208 Principles of Meteorology

An expansive and quantitative examination of the basic principles and dynamics of Earth's atmosphere and the phenomenon of weather. Initial topics include the origin and evolution of Earth's atmosphere, contemporary composition and structure of the atmosphere, formation of clouds and precipitation, types of precipitation, global wind patterns, air masses, and frontal systems. Students then examine in detail the formation and causes of the news-making metrological events that shape our daily lives - snowstorms, thunderstorms, tornadoes, hurricanes - and how meteorologists forecast these events. Think you can make a better forecast than what you see in the media? Students learn and practice the methods and techniques of weather forecasting and produce their own weather forecasts. Finally, students learn the relationship between global climate change and the probability of extreme weather events. This is an advanced introductory course designed for students majoring or minoring in Earth System Science. Note: Students may not receive credit for EASC 108 Understanding the Weather: Introduction to Meteorology after receiving credit for EASC 208 Principles of Meteorology.
Prerequisite: MATH 123 Introduction to Functions or a satisfactory score on the mathematics placement examination.

## EASC 228 Principles of Oceanography

An expansive and quantitative examination of the ocean's geology, chemistry, circulation, and biology. Specific topics include ocean basins; the origin and evolution of the chemistry of seawater; the physical dynamics of the sea including oceanic circulation, waves, and tides; tectonics of the oceanic lithosphere; geology of coastal areas; elementary marine ecology; and management practices for coastal and oceanic environments, with an emphasis on the implication of sea-level rise associated with global climate change. Extensive quantitative analysis and several field trips supplement lectures. This is an advanced introductory course designed for students majoring or minoring in Earth System Science. Note: Students may not receive credit in the Earth Systems Science major for EASC 118 Our Blue Planet: An Introduction to Oceanography after receiving credit for EASC 228 Principles of Oceanography.
Prerequisite: MATH 123 Introduction to Functions or a satisfactory score on the mathematics placement examination.

## EASC 296 On Thin Ice: Climate Change and the Cryosphere

An exploration of the cryosphere: the frozen water domain, consisting of glaciers, ice sheets, sea ice, and seasonal snow packs. The cryosphere is undergoing rapid melting due to climate change, with consequences for Earth's energy balance and global ocean circulation. Students examine the role of the cryosphere in Earth's climate history and current climate change, along with the physical properties, behavior and formation of ice, snow, glaciers, ice sheets and sea ice, as well as methods of observation and measurement. Students apply this knowledge to human societies' relationships with the cryosphere - biophysical, cultural and economic - and the impact of the great melt - with reference to the past, present, and possible futures of the frozen realm of Planet Earth.
Prerequisite: MATH 123 Introduction to Functions or permission of the instructor.

## EASC 308 Climatology and the Future of Human Society

A deep exploration of Earth's recent climate and the inevitable challenges climate change is now bringing to human societies. The class begins with the basic principles of the global climate system, including radiation laws, atmospheric dynamics, and the forcing factors resulting in climatic change. Following this introduction, focus turns to examining global climates, including the fragile climate of mountainous alpine and polar regions, where we can already see the effects of accelerated climate change and monsoonal regimes. With a clear understanding of Earth's "typical" climate, we turn our attention to what controls the temporal and spatial variability of those climates, with a particular emphasis on inter-annual, decadal, and centennial climate variability using climatic data obtained by the students. Finally, we apply all these concepts to estimating the centennial-scale anthropogenic climate change and the implications this change is having on the effective functioning of human societies. Note: Students may not receive credit for both this course and EASC 408 Climatology and the Future of Human Society.
Prerequisites: Junior status and completion of at least one General Education Domain II-B course with lab or permission of instructor.

## EASC 450 Seminar in Earth System Science

A capstone seminar for the earth science major focusing on the mass and energy flows linking Earth's sub-systems and how those flows have shaped and are shaped by life. There is an emphasis on reading topical articles from the peer-reviewed literature. Students are expected to lead discussions of these articles.
Prerequisite: Completion of at least five (5) geology, astronomy, and/or earth science courses, or permission of instructor.

## EASC 490 Independent Study in Earth System Science

An opportunity to continue to study a topic in greater depth or to explore topics or problems in the earth sciences that are new to the student. Admission to this course is open only to juniors and seniors who are Earth Science minors and who have an overall QPA of 2.70. Admission must be approved by the supervising faculty member and the department chair.

## EASC 495 Internship in Earth System Science

A supervised practical experience in a public or private agency, appropriate to the student's training and interests. The internship program is offered through cooperation of participating institutions that provide guidance for the interns. A minimum of 160 on-site hours is necessary to complete the internship in Earth System Science. The 160 hours must be completed within one (1) semester. The student must record the work done during the internship in the form of journal entries and/or a final paper or presentation as determined by the FSU supervising faculty and department chair. The internship in Earth System Science may be taken for one (1) course-credit as a major elective. A student may take up to two (2) separate internship experiences. Open to Earth System Science majors only.
Prerequisites: Senior standing, two (2) semesters completed at Framingham State University, overall GPA of 2.75 with a 2.75 GPA in courses for the major, and permission of department chair.

## ECONOMICS COURSES

## ECON 100 Contemporary Economic Problems and Issues (Gen. Ed. Domain III-B)

A discussion of current local, national, and international issues using economic analysis in order to better understand these issues and the world around us. A brief introduction to the basic tools of economic theory is given, and students then apply these tools to issues such as the distribution of income and poverty in society, crime, environmental problems, medical care, immigration, international trade, and the role of the U.S. in the world economy, inflation, unemployment and the growing national debt. The exact topics covered are selected based upon their current relevance.

## ECON 101 Principles of Macroeconomics (Gen. Ed. Domain III-C)

The study of the United States free enterprise system and its place in the global economy. After a consideration of basic economy concepts, the student is introduced to the forces that determine national income, employment, recession, inflation, and economic growth. Monetary and fiscal policy options are analyzed with emphasis on the economic, social, and political consequences.

## ECON 102 Principles of Microeconomics (Gen. Ed. Domain III-B)

An introduction to the behavior of individual decision makers, particularly consumers and firms, who must make choices under conditions of economic scarcity. The course focuses on how markets work to allocate resources, how households maximize their satisfaction from consumer opportunities subject to an income constraint, and how firms organize production and measure costs in order to maximize profits. Related topics include comparative advantage and trade, competition and monopoly, government regulation, and labor markets.

## ECON 106 American Economic History (Gen. Ed. Domain III-A)

An introduction of the evolution and development of the United States economy from precolonial times to the present. Topics include the precolonial Native American economy, the colonial period and the economy of the early United States, the economic impact of slavery, the Civil War and Reconstruction, continental expansion, industrialization, the economic impact of immigration, the World Wars, the Great Depression, the internationalization of the U.S. economy and the expanding role of government. Basic tools of economic analysis are introduced and used as appropriate, and the development of the institutions of the modern U.S. economy is emphasized. The role of both economic and non-economic factors on the development of the U.S. economy is stressed.

## ECON 200 The Economics of Globalization (Gen. Ed. Domain III-C)

The study of the economic processes behind globalization including international trade, comparative advantage, economic growth, and inequality. After a history of globalization and current topics in the global environment, students use tools of economic analysis to better understand and critique the implications of globalization. The class discusses institutions and policies around the global markets affecting labor markets, environment, health, and other aspects of world economies.

## ECON 290/390 Topics in Economics

Selected topics in an area of economics offered on occasion at the discretion of the department. Determination of where the course fits in the academic program are made on a case-by-case basis. Prerequisite: Case-by-case or permission of instructor.

## ECON 301 Intermediate Macroeconomic Theory

An in-depth analysis of the static and dynamic theories of aggregate economic behavior; determinants of consumption, investment, the demand for money, and economic growth.
Prerequisite: ECON 101 Principles of Macroeconomics and ECON 102 Principles of Microeconomics.

## ECON 302 Intermediate Microeconomic Theory

An in-depth analysis of the theory of consumer behavior, the firm and the industry, and the pricing of the factors of production; general equilibrium analysis, and an introduction to welfare economics. Prerequisite: ECON 101 Principles of Macroeconomics and ECON 102 Principles of Microeconomics.

## ECON 309 Labor Economics

An analysis of the nature of the job market. Some topics considered include: unemployment, wages, occupational choice, changing role of women, hiring standards, and relevancy in education programs. Discussion focuses on how society educates and trains its human resources for their entry and reentry into productive employment.
Prerequisite: ECON 101 Principles of Macroeconomics and ECON 102 Principles of Microeconomics.

## ECON 320 Financial Markets and the Monetary System

A survey of the development of money and credit, financial instruments, monetary theories, financial institutions, monetary systems and an examination of the relationship between monetary policy, financial markets, and economic welfare.
Prerequisites: Sophomore standing and ECON 101 Principles of Macroeconomics.

## ECON 323 The Economics of Sports

An examination of the market for sport entertainment. The major professional sports leagues and the College Sports industry exhibit several practices that separate them from other industries in the United States. The hiring of athletes and selling of the entertainment product are analyzed using economic theory and tools. The impact of policies created by the professional sports leagues, the National Collegiate Athletic Association (NCAA) organizations and the United States Government are applied to production and consumption of professional and collegiate sports.
Prerequisites: Sophomore Status and ECON 102 Principles of Microeconomics.

## ECON 333 Environmental Economics

An examination of environmental issues using the tools and methods of economic analysis. These tools are used to explain why environmental problems occur and to examine the numerous policies that have been enacted to address these problems. Analytical tools, such as risk analysis, risk management and cost-benefit analysis used by policymakers to design environmental policies, are discussed and evaluated, emphasizing both their strengths and weaknesses. Finally, this knowledge is applied to an in-depth examination of environmental problems and policies in specific areas such as air quality, solid waste disposal, toxic substances and water quality. Note: Students cannot receive credit for both this course and ECON 290/390 Topics in Economics and Business.
Prerequisite: ECON 102 Principles of Microeconomics.

## ECON 402 Industrial Organization

An examination of the strategic behavior of firms in imperfect markets with a focus placed upon game theory and non-cooperative models of interactions between firms. Topics include several models of oligopoly, theories of product differentiation, and competition over location. In addition, students examine dynamic pricing models, the implications of vertical and horizontal mergers, and the role of the government and antitrust policy.
Prerequisites: ECON 101 Principles of Macroeconomics and ECON 102 Principles of Microeconomics.

## ECON 410 International Trade

An analysis of the foundations and principles of international trade. Specific topics include: comparative advantage, terms of trade, factor movements, tariffs and protectionism.
Prerequisite: ECON 101 Principles of Macroeconomics and ECON 102 Principles of
Microeconomics.

## ECON 414 International Finance

An analysis of international financial markets from the perspectives of multinational enterprise management and open-economy policy-making. The course provides an in-depth analysis of how financial managers navigate foreign exchange risk and theoretical determinants of exchange rates, including interest rates and price levels. In addition to assessing the risks and benefits for firms and countries participating in global financial markets, this course also provides different financial strategies and tools for managing and mitigating foreign exchange and political risks through the viewpoints of managers and policy-makers.
Prerequisites: ECON 101 Principles of Macroeconomics and one (1) of the following courses: ECON 320 Financial Markets and the Monetary System, or FINA 248 Managerial Finance.

## ECON 480 Senior Economics Seminar

A seminar designed to afford advanced economics students an opportunity to integrate their studies in an open problem-solving format. The specific topics are developed according to the interests and needs of the participants.
Prerequisite: Permission of the instructor.

## ECON 490 Independent Study in Economics

Under the direction of a faculty member, the student pursues reading and research on a selected topic in economics.
Prerequisite: Permission of the instructor.

## ECON 495 Internship in Economics

A supervised practical experience in a public or private organization appropriate to the student's program of study. Before registering for the internship, the student must submit a proposal outlining the internship and showing how it integrates with the student's academic program. The internship requires written documentation of the student's experiences and a research project or critical evaluation of the experience. Students may earn up to four (4) course-credits. The internship is not intended to satisfy or substitute for any of the courses required for the major.
Prerequisite: A minimum of 3.00 GPA overall and 3.20 in department courses and approval of the department chair. Either grade point requirement may be waived at the discretion of the intern's internship supervisor with approval from the department chair.

## ECON 496 MetroWest Economic Research Center (MERC) Internship

A supervised practical experience at the MetroWest Economic Research Center (MERC) at Framingham State University. Interns actively participate in the role of MERC, which includes gathering, analyzing, and making available the economic research data to the general public in reference to the MetroWest area and several other nearby regions. Acceptance into the MERC internship program is by application only; application information is available in the MERC office. Student interns are required to work a fixed schedule of 10 hours per week over the length of the 16 week term. Students may earn more than one (1) course-credit through the program, but a maximum of one (1) course-credit may be used to satisfy the requirements for the Economics major.
Prerequisite: Permission of the instructor.

## EDUCATION COURSES

## EARLY CHILDHOOD EDUCATION

## ECED 311 Teaching Mathematics Grades PreK-2 with Pre-Practicum I

An exploration of the PreK-2 mathematics curriculum, preparing early childhood teacher candidates to teach mathematics to diverse student populations. Teaching practices and methods modeled are consistent with the Massachusetts Professional Standards for Teaching and the Standards for Mathematical Practice. PreK-2 teacher candidates design and implement lessons according to research on how young children learn mathematics and investigate the major mathematical concepts and content found in the most recent edition of the Massachusetts Mathematics Curriculum Framework for students in grades PreK-2. Candidates analyze classroom cases and videos to identify the mathematical concepts students struggle with in grades PreK-2 and develop their ability to communicate mathematical ideas more clearly and effectively to all students. Note: This course requires a pre-practicum field placement of 18 hours. The corequisite course EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with Pre-Practicum I requires an additional 18 hours, for a total of 36 hours of pre-practicum.
Prerequisites: EDUC 205 Equity in Educational Settings, EDUC 230 Social-Emotional Learning, and permission of the department chair.
Corequisite: EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I.

ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with PrePracticum II
An introduction to child development and early childhood education with an emphasis on the development of emergent literacy skills in young children. Developmentally appropriate, play-based learning teaching practices are explored and applied during pre-practicum experiences in the early childhood classroom. Teacher candidates develop culturally responsive practices and strategies to support the diverse population of students within an inclusive educational setting. This course requires a pre-practicum field placement of 18 hours in the Centers for Early Childhood Education. Note: The corequisite course EDUC 342 Sheltered English Immersion Grades PreK-6 with PrePracticum II requires an additional 18 hours, for a total of 36 hours of pre-practicum. A passing score is required on the "Communication and Literacy Skills" component of the Massachusetts Test for Educator Licensure (MTEL). An overall minimum GPA of 2.80 and minimum 2.80 GPA in the early childhood education major are required.
Prerequisites: ECED 311 Teaching Mathematics Grades PreK-2 with Pre-Practicum I, EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with Pre-Practicum I, and permission of the department chair.
Corequisite: EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II.

## ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with Pre-Practicum III

An exploration of the connections between English Language Arts and Social Studies to support the beneficial integration of these content areas within inclusive classrooms. Teacher candidates develop teaching strategies for beginning and fluent readers in critical literacy skills, such as phonemic awareness, phonics, fluency, vocabulary, and comprehension. In addition, teacher candidates explore topics such as civics, geography, history, culture, economics, and leadership to develop a comprehensive understanding of social studies subject matter knowledge. Teacher candidates are introduced to children's literature and literacy activities focused on social studies to create interdisciplinary learning experiences for children. Note: This course requires a pre-practicum field placement of 36 hours. The corequisite course Teaching Science Grades PreK-2 with Pre-Practicum III requires an additional 36 hours, for a total of 72 hours of pre-practicum. An overall minimum GPA of 2.80 and minimum 2.80 GPA in the early childhood education major are required.
Prerequisites: ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with PrePracticum II and permission of the department chair.
Corequisite: ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III.

## ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III

An inquiry-based approach to teaching science to young children that is based on current research in science education. Teacher candidates design and successfully implement developmentally appropriate science instruction for children in grades PreK-2. Science talks, inquiry teaching methods, curriculum development and adaptation, management of the learning environment, and safety in the science classroom are emphasized. Note: This course requires a pre-practicum field placement of 36 hours. The corequisite course EDUC 353 Teaching English Language Arts and Social Studies Grades PreK-2 with Pre-Practicum III requires an additional 36 hours, for a total of 72 hours of pre-practicum. An overall minimum GPA of 2.80 and minimum 2.80 GPA in the early childhood education major are required.
Prerequisites: EDUC 332/332L The Young Child and Emergent Literacy PreK-2 with Pre-Practicum II and permission of the department chair.
Corequisite: EDUC 353 Teaching English Language Arts and Social Studies Grades PreK-2 with Pre-Practicum III.

## ECED 440A Early Childhood Education Professional Practicum A

A supervised teaching experience at the kindergarten level in a public school setting. This practicum gives students an opportunity to develop and practice teaching competencies under the guidance of a supervising practitioner and a University supervisor. During regularly scheduled seminars, students share experiences, solve problems, and reflect on their teaching practice. Note: A practicum (student teaching) application must be submitted to the Educator Licensure and Placement Office by October 1st for spring semester and February 15th for fall semester. Passing scores on all Massachusetts Tests for Educator Licensure (MTEL) required for the Early Childhood license; overall GPA of 2.80 and 2.80 GPA in all courses in the early childhood education major.

Prerequisites: EDUC 353 Teaching English Language Arts and Social Studies Grades PreK-2 with Pre-Practicum III, ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III, and permission of the department chair.

## ECED 440B Early Childhood Education Professional Practicum B

A supervised teaching experience in a public school classroom (grades 1-2) five days per week for ten weeks. This practicum gives students an opportunity to develop and practice teaching competencies under the guidance of a cooperating teacher and a college supervisor. During two-hour seminars, held every other week, students share experiences, solve problems, and reflect on their teaching practice.
Prerequisite: A passing score on the required tests of the Massachusetts Test for Educator Licensure (MTEL) for Early Childhood teachers; Satisfactory completion of ECED 440A Early Childhood Education Professional Practicum A. A practicum (student teaching) application must be submitted to the Office of Professional Experiences by October 1st for spring semester and February 15th for fall semester.

## EDUCATION CORE

## EDUC 110 Education in American Society Grades PreK-6

A consideration of education in the United States in its social, political, and economic contexts. Lectures and seminars include an analysis of the historical, philosophical, and social foundations of education and of school organization and purpose. The course deals with the origins of schools in the United States, other agencies of education, and how the present educational structure has taken shape. Consideration of contemporary issues is of major importance, including the roles of the American school in a democratic, multicultural society. The course is intended to help students determine whether the teaching profession is suited to their individual interests and abilities. Note: Students cannot receive credit for both this course and EDUC 200 Foundations of Secondary Education with Pre-Practicum I.

## EDUC 200 Foundations of Secondary Education with Pre-Practicum I

A consideration of secondary education in the United States in its social, political, and economic contexts. The course deals with the origins of secondary schools in the United States, other agencies of education, and how the present secondary education structure has taken shape. Study of the US Constitution and the Massachusetts State Constitution are also integrated with course topics. Lectures, seminars and pre-practicum field experience include an analysis of the historical, philosophical, and social foundations of secondary education and of school organization and purpose in the context of middle and high schools. Consideration of contemporary issues is of major importance, including the roles of the American secondary school in a democratic, multicultural society. The course is intended to help students determine whether the teaching profession is suited to their individual interests and abilities. Note: This course requires a pre-practicum field placement of 36 hours. This course fulfills the Massachusetts state law requiring the study of the United States and Massachusetts Constitutions. This course is required for all students wishing to obtain a secondary education initial teaching license. Students cannot receive credit for both this course and for EDUC 110 Education in American Society, PreK-6.
Prerequisites: Sophomore or higher standing and permission of the department chair.

## EDUC 205 Equity in Educational Settings

An overview of current issues and research related to race, class, culture, language, and other social factors in schools across the United States. The concept of intersectionality is used to look across these factors in order to explore ways in which these issues impact groups in different ways within the P-12 educational system. Using the "intersectionality" frame helps to create a lens to look at social factors related to who is succeeding in school settings and how these schools operate to meet the needs of children and their families. Students examine research from education and the social sciences. The course introduces culturally relevant pedagogy and analyzes teaching practices in order to equip students with effective models to teach all children and partner with all families.

## EDUC 215 Action Research in Education

An introduction to educational research and evaluation with an emphasis on action research methodology. Students read, evaluate, and use research to answer problems of practice. Qualitative and quantitative methodology, the formulation of a research question/hypothesis, and the preparation of a formal research proposal are addressed. Students conduct a literature review related to an area of educational interest and formulate a proposed action research study based on the review. Note: At least one introductory course in statistics is recommended.
Prerequisites: EDUC 110 Education in American Society PreK-6, MATH 110 Mathematics for Elementary Educators I, and ENWR 110 Composition II with a minimum grade of C- (1.70), or permission of the instructor.

## EDUC 230 Social-Emotional Learning

An examination of the social-emotional dimensions of teaching and learning. Students analyze and critique evidence-based theories and practices including social-emotional learning, culturally responsive pedagogy, and positive behavioral interventions and supports. Discussions use a critical lens to deconstruct common classroom and behavior management practices in PreK-12 schools, through sociocultural contextual frameworks. An examination of teacher social-emotional well-being and its effects on pedagogy is also undertaken. Students grapple with ethical and professional case studies in order to develop an integrated approach to equitable, effective social-emotional learning supports for all children and youth.
Prerequisites: EDUC 110 Education and American Society Grades PreK-6 and PSYC 200 Psychology of Development.

## EDUC 246 Sheltered English Immersion in Secondary Education (Gen. Ed. Domain III-C)

An investigation of the structure of language and the factors that influence second language acquisition at the secondary education level. Students consider the impact of culture and diversity on the teaching and learning of English Language Learners (ELLs). Students learn the instructional strategy knowledge necessary to effectively work with and assess ELLs at a variety of English proficiency levels and content areas. Note: It is recommended to take this course concurrently with, or after, the 300 -level secondary methods courses. Note: Open to Secondary Education minors only.
Prerequisites: EDUC 200 Foundations of Secondary Education with Pre-Practicum I and PSYC 200 Psychology of Development.

## EDUC 250 Special Topics in Education (0.5 Course-credits)

An examination of a selected issue connected to education. Topics vary by instructor and explore issues emerging from recent research in the field. This course, on a different topic, may be repeated for credit.

## EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with Pre-Practicum I

An introduction to special education with a focus on inclusive practices that early childhood and elementary educators use to support children with disabilities in general education settings. Students explore the concept of disability and how it is socially constructed and understood in cultural contexts. Students study special education laws and procedures, disability categories, eligibility determination, and Individualized Education Programs (IEPs). Students also study research-based methods such as universal design for learning (UDL) and multi-tiered systems of support (MTSS) for supporting all learners. The course also includes an exploration of educational technology and assistive technology tools. Field experiences allow the students to observe and interview professionals who provide special education services. Note: This course requires a pre-practicum field placement of 18 hours. The corequisite course ECED 311 Teaching Mathematics Grades PreK2 with Pre-Practicum I or ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I requires an additional 18 hours, for a total of 36 hours of pre-practicum.
Prerequisites: EDUC 205 Equity in Educational Settings, EDUC 230 Social-Emotional Learning, and permission of the department chair.
Corequisite: ECED 311 Teaching Mathematics GradesPreK-2 with Pre-Practicum I or ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I.

## EDUC 305 Educational Policy

An examination of educational policy in the United States, with a focus on P-12 education. The course begins with a brief overview of the debates around the purposes of schooling in the American context, as well as a range of perspectives on why it has proven challenging to improve U.S. schools. Students examine various policy problems and a range of federal and state reform efforts designed to respond to those problems. The issues to be examined include the achievement gap, school choice reforms, and urban education reform. The course draws upon seminal texts on educational policy, as well as contemporary academic and popular writing.
Prerequisite: EDUC 205 Equity in Educational Settings.

## EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II

An investigation of the structure of language and the factors that influence second language acquisition in the early childhood and elementary grades. Students consider the impact of culture and diversity on the teaching and learning of English Language Learners (ELLs). Students learn the instructional strategy knowledge necessary to effectively work with and assess ELLs at a variety of English proficiency levels and content areas in grades Pre-K to 6. Note: This course requires a prepracticum field placement of 18 hours. The corequisite course ECED 332/322L The Young Child and Emergent Literacy Grades PreK-2 with Pre-Practicum II, or ELED 332 The Child and Literacy Grades 1-6 with Pre-Practicum II requires an additional 18 hours, for a total of 36 hours of prepracticum. A passing score is required on the "Communication and Literacy Skills" component of the Massachusetts Test for Educator Licensure (MTEL). An overall minimum GPA of 2.80 and minimum 2.80 GPA in all courses in the early childhood or elementary education majors.
Prerequisites: EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I and permission of the department chair.
Corequisite: ECED 332/322L The Young Child and Emergent Literacy Grades PreK-2 with PrePracticum II, or ELED 332 The Child and Literacy Grades 1-6 with Pre-Practicum II.

## EDUC/SOCI 350 Education and Social Change

An examination of two interrelated themes: how social change shapes education and how education expresses social change. Through applied topics such as education's influences on social inequalities through different forms of education, the relationship between the economy and education, and the history of schooling in the United States, students learn key concepts of social change and education and of the relationship between the two. Readings include theory, research, history, and issuesfocused articles pertaining to these topics. Students assess contemporary media on education and social change, and they complete independent projects related to topics in education and social agendas.
Prerequisite: SOCI 101Introduction to Sociology, SOCI 130 Social Problems or EDUC 200
Foundations of Secondary Education with Pre-Practicum I.

## EDUC 360 Special Topics in Education

An in-depth examination of issues connected to education research and practices. Topics may vary, by instructor, with particular emphasis on the contributions of recent research. This course may be taken twice, provided that a different special topic is offered.
Prerequisites: Junior status and completion of two (2) 300-level Education courses, or permission of the instructor. Additional prerequisites may be required dependent upon topic.

## EDUC 450 Principles of Educational Curriculum and Assessment

An examination of strategies and practices used in educational settings to inform instruction, develop curriculum, and assess student learning. Students design a curriculum unit of study and administer, analyze, and interpret both formative and summative assessment data including observations, performance assessments, portfolios, tests, quizzes, and rubrics. Emphasis is placed on the importance of high-quality feedback in the teaching, learning, and assessment cycle. A full-time student teaching practicum placement is required. Note: A passing score on all Massachusetts Tests for Educator Licensure (MTEL) is required for the early childhood or elementary education license. An overall minimum GPA of 2.80 and minimum 2.80 GPA in all courses in the early childhood or elementary education majors.
Prerequisites: ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with Pre-Practicum III or ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III, or permission of the department chair.
Corequisites: ECED 440A/440B Early Childhood Education Professional Practicum A and B or ELED 440A/440B Elementary Education Professional Practicum A and B, or permission of the department chair.

## EDUC 490 Independent Study: Current Topics in Education

An investigation into a topic in education selected by the student with the guidance of a faculty member in the Education Department. The student and faculty member work collaboratively to select a topic, identify the scope and sequence of the independent study, and establish required outcomes for the course. All proposals must be accepted by the instructor and approved by the Department Chair.
Prerequisites: Two (2) courses within an Education major or minor and a minimum overall GPA of 2.80.

## EDUC 495 Internship in Education

A supervised experience in an educational setting appropriate to the student's program of study. A minimum of 10 hours per week ( 150 hours total) of field experience is required. Students attend regularly scheduled seminar meetings with an instructor to discuss assigned readings and field experiences. A culminating assignment in the form of a written report or public presentation is required. Note: Requires a minimum overall GPA of 2.50 .
Prerequisites: Completion of the three (3) 300-level courses in Education or Child and Family Studies; Junior standing and permission of the Education Department chair.

## ELEMENTARY EDUCATION

## ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I

An exploration of the elementary mathematics curriculum in grades 1-6, preparing elementary teacher candidates to teach mathematics to diverse student populations. Teaching practices and methods modeled are consistent with the Massachusetts Professional Standards for Teaching and the Massachusetts State Standards for Mathematical Practice. Elementary teacher candidates design and implement lessons according to research on how elementary age children learn mathematics and investigate the major mathematical concepts and content found in the most recent edition of the Massachusetts Mathematics Curriculum Framework. Candidates analyze classroom cases and videos to identify the mathematical concepts students learn and often struggle with in elementary school and develop their ability to communicate mathematical ideas more clearly and effectively to diverse students. This course requires a pre-practicum field placement of 18 hours. Note: The corequisite course EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I requires an additional 18 hours, for a total of 36 hours of pre-practicum. Acceptance to the major in elementary education; Students in the licensure concentration must have earned a passing score on the "Communication and Literacy Skills" component of the Massachusetts Test for Educator Licensure (MTEL). An overall minimum GPA of 2.80 and minimum 2.80 GPA in the elementary education major are required.
Prerequisites: EDUC 205 Equity in Educational Settings, EDUC 230 Social-Emotional Learning, and permission of the department chair.
Corequisite: EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I.

## ELED 332 The Child and Literacy Grades 1-6 with Pre-Practicum II

An overview of balanced, integrated, and interactive approaches to evidence-based literacy instruction. This course equips elementary teacher candidates with foundational knowledge and strategies in teaching and assessing 21 st century literacies-the processes and phases of literacy and language development and study of multimodal text demands. With support and explicit guidance varied applications of this knowledge occur within authentic teaching and learning contexts. Emphasis on self-critique and analytical thinking furthers instructional design, implementation of an effective classroom literacy environment, and development of assessments responsive to multiple factors that affect the everyday literate lives of children in and out of school. This course requires a pre-practicum field placement of 18 hours. Note: The corequisite course EDUC 342 Sheltered English Immersion PreK-6 with Pre-Practicum II requires an additional 18 hours, for a total of 36 hours of pre-practicum. A passing score is required on the "Communication and Literacy Skills" component of the Massachusetts Test for Educator Licensure (MTEL). An overall minimum GPA of 2.80 and minimum 2.80 GPA in the elementary education major are required.

Prerequisites: EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I, ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I, and permission of the department chair.
Corequisite: EDUC 342 Sheltered English Immersion PreK-6 with Pre-Practicum II.

## ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with PrePracticum III

An interdisciplinary investigation of learning that invites active exploration of complex social issues by integrating various disciplines into satisfying problem-solving or decision-making experiences. By highlighting the respective content, tools, texts, and investigative processes of history, geography, civics, economics, anthropology and sociology alongside literacy strategies and practices, elementary teacher candidates apply their requisite subject matter knowledge in planning and teaching assessment-based, engaging, and effective Social Studies and English Language Arts lessons in authentic classroom contexts. Note: This course requires a pre-practicum field placement of 36 hours. The corequisite course ELED 363 Teaching Science Grades1-6 with Pre-Practicum III requires an additional 36 hours, for a total of 72 hours of pre-practicum. An overall minimum GPA of 2.80 and minimum 2.80 GPA in the elementary education major are required.
Prerequisites: ELED 332 The Child and Literacy Grades 1-6 with Pre-Practicum II and permission of the department chair.
Corequisite: ELED 363 Teaching Science Grades1-6 with Pre-Practicum III.

## ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III

An inquiry-based approach to teaching science to children that is based on current research in science education. Teacher candidates design and successfully implement developmentally appropriate science instruction for children in grades 1-6. Science talks, inquiry teaching methods, curriculum development and adaptation, management of the learning environment, and safety in the science classroom are emphasized. Note: This course requires a pre-practicum field placement of 36 hours. The corequisite course EDUC 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III requires an additional 36 hours, for a total of 72 hours of pre-practicum. An overall minimum GPA of 2.80 and minimum 2.80 GPA in the elementary education major is required.
Prerequisites: ELED 332 The Child and Literacy Grades1-6 with Pre-Practicum II and permission of the department chair.
Corequisite: EDUC 353 Teaching English Language Arts and Social Studies Grades 1-6 with PrePracticum III.

## ELED 440A Elementary Education Professional Practicum A

A supervised teaching experience in a classroom (grades 1-6). This practicum gives students an opportunity to develop and practice teaching competencies under the guidance of a supervising practitioner and a University supervisor. During regularly scheduled seminars, students share experiences, solve problems, and reflect on their teaching practice. Note: A practicum (student teaching) application must be submitted to the Educator Licensure and Placement Office by October 1st for spring semester and February 15th for fall semester. Passing scores on all Massachusetts Tests for Educator Licensure (MTEL) are required for the Elementary license. An overall minimum GPA of 2.80 and minimum 2.80 GPA in the elementary education major are required.
Prerequisites: ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with PrePracticum III, ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III and the permission of the department chair.

## ELED 440B Elementary Education Professional Practicum B

A supervised teaching experience continuing in a classroom (grades 1-6) five days per week. This practicum gives students an opportunity to develop and practice teaching competencies under the guidance of a cooperating teacher and a University supervisor. During two-hour seminars, held every other week, students refine instructional techniques, solve problems, and reflect on their teaching practice.
Prerequisite: A passing score on the appropriate subject area test of the Massachusetts Test for Educator Licensure (MTEL); Satisfactory completion of ELED 440A Elementary Education Professional Practicum A. A practicum (student teaching) application must be submitted to the Office of Professional Experiences by October 1st for spring semester and February 15th for fall semester.

## SECONDARY EDUCATION

## EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

An interpretation of the basic principles of teaching and classroom methodology that support all learners. Emphasis is given to methods, materials and environmental arrangements that support learners with special needs, including students with disabilities, students who are homeless, students who are gifted, and those with other special needs. Educational technology, including assistive technology, Web 2.0 resources, and web-based tools, is addressed. Candidates develop technologybased tools to communicate with students and parents and evaluate potential web-based resources for planning and teaching. Careful attention is given to accommodations, modifications, differentiation and Universal Design, using the Massachusetts Curriculum Frameworks as a basis for instructional planning. Responsiveness to all learners is stressed.
Corequisite: Secondary Methods content course appropriate for the license sought (e.g. English, History, Visual Art, etc.)
Prerequisites-Undergraduates: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 321 Secondary Methods with Field Study II: English 5-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to inquiry methods of teaching, socio-cultural forces impacting classrooms, and organizational patterns and structures of the secondary setting. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 322 Secondary Methods with Field Study II: History/Social Studies 5-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to inquiry methods of teaching, socio-cultural forces impacting classrooms, and organizational patterns and structures of the secondary setting. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 323 Secondary Methods with Field Study II: Mathematics 5-8 \& 8-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to inquiry methods of teaching, socio-cultural forces impacting classrooms, and organizational patterns and structures of the secondary setting. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 325 Secondary Methods with Field Study II: Science 8-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to inquiry methods of teaching, socio-cultural forces impacting classrooms, and organizational patterns and structures of the secondary setting. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 327 Secondary Methods with Field Study II: World Languages 5-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to methods in teaching world languages, socio-cultural forces, and organizational patterns. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 and 5-12

An interpretation of the basic principles of teaching and classroom methodology appropriate for the license sought. Emphasis is given to methods in teaching visual art, socio-cultural forces, and organizational patterns. Careful attention is given to the use of the Massachusetts Curriculum Frameworks in lesson and unit planning. Clarity of communication, design of instruction, and effective evaluation and responsiveness to all learners are stressed. The field study involves six (6) or more hours per week, for a minimum of 72 total hours, in a public school classroom appropriate for the license sought.
Corequisite: EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology must be taken concurrently.
Prerequisites: A passing score on each portion of the Communication and Literacy Skills test of the Massachusetts Tests for Educator Licensure (MTEL); overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development; completion of EDUC 200 Foundations of Secondary Education with Pre-Practicum I, PSYC 200 Psychology of Development.

## EDPS 421A Secondary Professional Practicum A: English 5-12 (2 Course-credits)

A supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course. This course is graded as satisfactory/unsatisfactory.
Corequisite: EDPS 421B Secondary Professional Practicum B: English 5-12.
Prerequisites: Satisfactory completion of student teaching application which includes a passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDIL 321 Secondary Methods with Field Study II: English; any courses specified by the major department; overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor, including PSYC 200 Psychology of Development.

## EDPS 421B Secondary Professional Practicum B: English 5-12 (2 Course-credits)

A second supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course.
Corequisite: EDPS 421 Secondary Professional Practicum A: English 5-12.
Prerequisites: A passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDPS 421 Secondary Professional Practicum A: English 5-12.

## EDPS 422A Secondary Professional Practicum A: History 5-12 (2 Course-credits)

A supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course. This course is graded as satisfactory/unsatisfactory.
Corequisite: EDPS 422B Secondary Professional Practicum B: History 5-12.
Prerequisites: Satisfactory completion of student teaching application which includes a passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDIL 322 Secondary Methods with Field Study II: History; GPA of 3.00 in major in History Teaching Concentration (UHIT), overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development.

## EDPS 422B Secondary Professional Practicum B: History 5-12 (2 Course-credits)

A second supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice.
Corequisite: EDPS 422A Secondary Professional Practicum A: History 5-12.
Prerequisites: A passing score on all Massachusetts Tests for Educator Licensure (MTEL) required for the license sought; EDUC 422A Secondary Professional Practicum A: History 5-12.

EDPS 423A Secondary Professional Practicum A: Mathematics 5-8 (2 Course-credits) A supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course. This course is graded as satisfactory/unsatisfactory.
Corequisite: EDPS 423B Secondary Professional Practicum B: Mathematics 5-8.
Prerequisites: Satisfactory completion of student teaching application which includes a passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDIL 323 Secondary Methods with Field Study II: Mathematics, any courses specified by the major department, overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development.

## EDPS 423B Secondary Professional Practicum B: Mathematics 5-8 (2 Course-credits)

 A second supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice.Corequisite: EDPS 423A Secondary Professional Practicum A: Mathematics 5-8.
Prerequisites: A passing score on all Massachusetts Tests for Educator Licensure (Mathematics); EDPS 423A Secondary Professional Practicum A: Mathematics 5-8.

EDPS 424A Secondary Professional Practicum A: Mathematics 8-12 (2 Course-credits)
A supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course. This course is graded as satisfactory/unsatisfactory.
Corequisite: EDPS 424B Secondary Professional Practicum B: Mathematics 8-12.
Prerequisites: Satisfactory completion of student teaching application which includes a passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDIL 323 Secondary Methods with Field Study II: Mathematics, any courses specified by the major department, overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development.

EDPS 424B Secondary Professional Practicum B: Mathematics 8-12 (2 Course-credits)
A second supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice.
Corequisite: EDPS 424A Secondary Professional Practicum A: Mathematics 8-12.
Prerequisites: A passing score on all Massachusetts Tests for Educator Licensure; EDPS 424A Secondary Professional Practicum A: Mathematics 8-12.

## EDPS 425A Secondary Professional Practicum A: Science 8-12 (2 Course-credits)

A supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice. Other than the co-requisite, no other course may be taken while enrolled in this course. This course is graded as satisfactory/unsatisfactory.
Corequisite: EDPS 425B Secondary Professional Practicum B: Science 8-12.
Prerequisites: Satisfactory completion of student teaching application which includes a passing score on all required Massachusetts Tests for Educator Licensure (MTEL) for the license sought; EDIL 325 Secondary Methods with Field Study II: Science, any courses specified by the major department, overall GPA of 2.80 and 2.80 GPA in all courses in the secondary education minor including PSYC 200 Psychology of Development.

## EDPS 425B Secondary Professional Practicum B: Science 8-12 (2 Course-credits)

A second supervised student-teaching practicum in a public school classroom five days per week, appropriate for the license sought, in which students have an opportunity to practice teaching competencies under the supervision of a supervising practitioner and a University supervisor. Students also participate in a seminar to analyze teaching strategies, refine classroom management practices, develop curriculum, and reflect on their teaching practice.
Corequisite: EDPS 426A Secondary Professional Practicum A: Science 8-12.
Prerequisites: A passing score on all Massachusetts Tests for Educator Licensure; EDPS 426A Secondary Professional Practicum A: Science 8-12.

EDPS 428A Secondary Professional Practicum A: Visual Art PreK-8 (2 Course-credits)
A supervised experience in teaching visual art. After an initial period of intensive seminar at the University, the student participates in the complete program every day in the school of placement under the guidance of a cooperating teacher and a University supervisor. Seminar meetings are scheduled during this period. No other course may be taken while enrolled in this course.
Corequisite: EDPS 428B Secondary Professional Practicum B: Visual Art Pre-K-8.
Prerequisite: A passing score on the appropriate subject area test of the Massachusetts Test for Educator Licensure (MTEL); EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12, any requirements specified by the Art and Music Department, and satisfaction of the requirements specified in "Admission into Teacher Education and Student Teaching Practicum" elsewhere in this Catalog.
EDPS 428B Secondary Professional Practicum B: Visual Art PreK-8 (2 Course-credits) A second supervised experience in teaching visual art Pre-K to 8 . After an initial intensive seminar at the University to assess the work of EDPS 428A Secondary Professional Practicum A: Visual Art PreK-8, the student participates in the complete program everyday in the same school of placement as in EDPS 428A under the guidance of a cooperating teacher and a University supervisor. Seminar meetings are scheduled during this period. The course concludes with a period of intensive seminars at the University. No other courses may be taken while enrolled in this course.
Prerequisite: A passing score on the appropriate subject area test of the Massachusetts Test for Educator Licensure (MTEL); EDPS 428A Secondary Professional Practicum A: Visual Art PreK-8.

## EDPS 429A Secondary Professional Practicum A: Visual Art 5-12 (2 Course-credits)

A supervised experience in teaching visual art. After an initial period of intensive seminar at the University, the student participates in the complete program every day in the school of placement under the guidance of a cooperating teacher and a University supervisor. Seminar meetings are scheduled during this period. No other course may be taken while enrolled in this course.
Corequisite: EDPS 429B Secondary Professional Practicum B: Visual Art 5-12.
Prerequisite: A passing score on the appropriate subject area test of the Massachusetts Test for Educator Licensure (MTEL); EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12, any requirements specified by the Art and Music Department, and satisfaction of the requirements specified in "Admission into Teacher Education and Student Teaching Practicum" elsewhere in this Catalog.

EDPS 429B Secondary Professional Practicum B: Visual Art 5-12 (2 Course-credits) A second supervised experience in teaching visual art 5-12. After an initial intensive seminar at the University to assess the work of EDPS 429A Secondary Professional Practicum A: Visual Art 5-12, the student participates in the complete program everyday in the same school of placement as in EDPS 429A under the guidance of a cooperating teacher and a University supervisor. Seminar meetings are scheduled during this period. The course concludes with a period of intensive seminars at the University. No other courses may be taken while enrolled in this course.
Prerequisite: A passing score on the appropriate subject area test of the Massachusetts Test for Educator Licensure (MTEL); EDPS 429A Secondary Professional Practicum A: Visual Art 5-12.

## ENGINEERING COURSES

## EGNR 101 Introduction to Engineering

An introduction to engineering methods, specifically for students in the pre-engineering program. Students develop a basic understanding of the engineering design process, including problem solving, research, computation, process design, evaluation criteria and communication that provides the foundation for all future engineering courses. The students become cognizant of current issues that arise at the intersection of technology and society. In addition, students also explore the various types of engineering and career paths available to them.

## EGNR 201 Engineering Mechanics

An introduction to statics and dynamics in engineering. Presentation of the concepts of static equilibrium for particles and rigid bodies is followed by discussion of the determination of external and internal forces for structures such as trusses and frames. Moments of inertia, centroids or plane areas, free-body diagrams, and basic concepts of friction are examined. Additional topics include: kinematics, focusing on patterns of motion in space and the effects of forces on motion; work and energy, focusing on potential and kinetic energy, kinetic friction, and conservation of energy; and linear spring/mass systems, examined for effects of free, damped, and torsional mechanical vibration. Analyses of statics and dynamics include use of software tools such as MATLAB and 3-D CAD software.
Prerequisites: EGNR 101 Introduction to Engineering, MATH 219 Calculus I, and PHYS 211 Principles of Physics I.

## EGNR 211 Engineering Statics

A comprehensive study and analysis of structures in equilibrium. Presentation of the concepts of static equilibrium for particles and rigid bodies is followed by discussion of the determination of external and internal forces for structures such as trusses and frames. Moments of inertia, centroids or plane areas, free-body diagrams, and basic concepts of friction are examined. Tools such as AUTOCAD and MATLAB are utilized for analysis of structures.
Corequisite: PHYS 211/211L Principles of Physics I with Lab
Prerequisites: ENGR 101 Introduction to Engineering and MATH 219 Calculus I.

## EGNR 212 Engineering Dynamics

A comprehensive study and analysis of objects in motion under the action of forces. Presentation of the concepts of kinematics, focusing on patterns of motion in space and the effects of forces on motion, work and energy, focusing on potential and kinetic energy, kinetic friction, and conservation of energy, and linear spring/mass systems, examined for effects of free, damped, and torsional mechanical vibration. Tools such as MATLAB are used for simulating the motion of objects.
Corequisite: PHYS 212/212L Principles of Physics II with Lab.
Prerequisites: EGNR 211 Engineering Statics and MATH 220 Calculus II.

## EGNR 272 Environmental Pollution

A comprehensive study of environmental pollution with emphasis on air and water pollution and their impacts on the environment. Students apply fundamental scientific and engineering concepts to topics that include air pollutants and their properties, environmental impacts of air pollutants, water pollution, water supply issues and processes involved in the design of wastewater treatment. Engineering design techniques to combat these issues are discussed.
Prerequisites: CHEM 108/108L Principles of Chemistry and Quantitative Analysis, EGNR 101 Introduction to Engineering, and ENVS 101 Introduction to Environmental Science and Policy.

## ENGLISH COURSES

## ENGL 111 Reading Literature (Gen. Ed. Domain I-B)

An introduction to critical reading and discussion of poetry, prose, and drama for the purpose of increasing the student's appreciation of the dynamics between themes and forms in the art of literature. Some sections emphasize literary forms and others philosophical, moral, or social themes.

## ENGL 118 Monsters (Gen. Ed. Domain I-B)

An exploration of literature about monsters and the monstrous. Readings include a variety of texts that encourage us to think about how and why monsters, specters, and creatures are a long-standing staple of both our literary and cultural imaginations. Note: This course is not open to students with junior or senior standing in the English major or English minor.

## ENGL 124 Literature and Social Justice (Gen. Ed. Domain III-C)

An exploration of literature's role in raising awareness about and engaging with civil rights and human rights. How can literary artistry encourage us to imagine the complexity of social justice issues? Readings address topics such as racism, sexism, poverty, religious discrimination, genocide, and children's rights. Note: This course is not open to students with junior or senior standing in the English major or English minor.

## ENGL 132 Alternative Pasts (Gen. Ed. Domain I-B)

An introduction to the study of literature, focusing on literary texts that examine our relationship with the past. What stories do writers pass on to future generations, and why? Students explore how those stories illuminate or contradict each other, how they differ from official records, and how writers balance fact, interpretation, and imagination. Note: This course is not open to students with junior or senior standing in the English major or English minor.

## ENGL 150 Rebels and Revolution (Gen. Ed. Domain I-B)

An exploration of literature about rebels who defy the established social order. Students engage with a variety of texts while gaining a perspective on the representation of resistance in literature. Note: This course is not open to students with junior or senior standing in the English major or English minor.

## ENGL 186 Banned Books (Gen. Ed. Domain I-B)

An exploration of literature that has been censored, banned or challenged for sexual, racial, religious, political, or violent content. Students examine how and why texts generate controversy. Note: This course is not open to students with junior or senior standing in the English major or English minor.

## ENGL 201 Mythology and Folklore (Gen. Ed. Domain I-B)

A comparative analysis of myths and folklore from various cultures, such as Native American, Greek, American, Teutonic, and African American. A significant part of the exploration deals with issues of class and race, as well as gender problems like female-male stereotyping. Other topics may include postulation of common types of tales and motifs, theories of the origin and nature of myth and folklore, as well as consideration of each myth or folklore piece as representative not only of its genre but also a possibly intact unified structure.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 202 Comparative Mythology

A comparative study of primarily ancient myths through the Western and non-Western world, emphasizing such sources as Indian, Mayan, Finnish, Native American, Near Eastern, and Greek. Each belief system is first studied by itself before resemblances to other systems are sought. Finding elements that recur in a myth and that appear in other myths leads to considering the origin and nature of myth, as well as the significance of myth for a group of people.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 203 Contemporary Global Literature (Gen. Ed. Domain III-B)

An introduction to contemporary literature that engages with global issues with a focus on nonWestern texts. The course may also include Western writings which highlight international encounters between cultures. Topics may include diaspora, national and transnational identities, and globalization. Readings are in English and draw on various genres.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 204 Literary Study

The foundation course for the major in English. This seminar focuses on close reading, analytical writing, and research methods. Students examine in depth one important work in English (or a group of related works) and the criticism surrounding it. English majors are encouraged to take Literary Study as early as possible. Literary Study is a prerequisite for all 300-level English courses used to fulfill 300-level requirements.
Prerequisite: ENWR 110 Composition II; for students not in the English major/minor or the Interdisciplinary Major in Language Arts, permission of the instructor is required.

## ENGL 206 Film and Literature

An examination of the relationship between film and literature with a close analysis of the aesthetic and practical problems involved in adapting fiction to the film. Readings include film and literary criticism, as well as the fiction upon which films viewed in class are based. Discussions focus on the potentialities, limitations and nature of each art form.
Prerequisite: ENWR 110 Composition II or permission of the instructor.
ENGL 207 The Language of Film (Gen. Ed. Domain I-B)
A study of the vocabulary proper to an intelligent discussion of film. Topics to be included are directorial techniques, the role of editing, styles of film acting, the relation of one shot to another, mise-en-scene and montage, lighting, and the relationship between form and content. Emphasis is on an aesthetic of the film from the perspective of the film-viewing experience.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 208 Film Genres

Studies of genre films concentrating on the historical, thematic, and specifically cinematic nature of representative sound and silent works. Possible genres include comedy, the western, the gangster film, the musical, the horror film and science fiction, and the "woman's picture." A different genre is selected each time the course is offered.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 209 Film History: 1895 to 1960 (Gen. Ed. Domain III-B)

An overview of the major developments in film history from 1895 to 1960. Starting with early filmic experimentation and covering the rise and fall of the classical Hollywood studio system, the course includes significant directors, genres (such as the gangster film and film noir), and international movements. Wars, revolution, immigration, the Great Depression, and the Cold War are studied for their influence on the new medium of film. Note: Students may not receive credit for both ENGL 209 Film History: 1895 to 1960 and ENGL 205 Film History and Criticism.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 212 Children's Literature

A study of literature for children from pre-school through grade 6. The course examines classic and contemporary board books, picture books, chapter books, and pre-adolescent texts. Through an exploration of seminal authors, works, genres, and criticism, the course emphasizes trends and developments in children's literature. An introduction to basic bibliographic tools and review media is included.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 217 The History of Children's Literature

A survey of children's literature from the eighteenth century to the present. Topics may include early chapbooks, picture books, and the development of the novel for children. Students examine changing representations of the child and the role literature has played in defining childhood.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 220 Shakespeare (Gen. Ed. Domain I-B)

An introduction to Shakespearean comedy, tragedy, history, and romance in such plays as As You Like It, Measure for Measure, King Lear, Othello, Henry V, and The Tempest. The course explores the Elizabethan-Jacobean roots of Shakespeare's plays and their continuing popularity by studying language, dramatic technique, performance on stage and screen, and the representation of gender, race, and class.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 225 Introduction to Journalism

An introduction to the profession of journalism providing historical background, basis for libel, and other fundamental, technical and legal knowledge for journalists. Students produce extensive writing in a variety of journalistic formats, such as news, features, and op/ed pieces. The course also investigates current issues in contemporary journalism by analyzing a wide range of newspapers. Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 228 Disability in Literature (Gen. Ed. Domain I-B)

An examination of how people with disabilities have been represented in literary texts. Genres may include folk tales, religious texts, short fiction, essays, memoir, and poetry. The course focuses on social norms and how literature upholds or challenges these standards. Classes are devoted to the discussion of literary works, with a particular emphasis on contemporary American literature.
Prerequisite: ENWR 110 Composition II.

## ENGL 229 Film History: 1960 to Present

A study of film history from 1960 to the present. The course includes the New Hollywood, independent cinema, the emergence of postcolonial filmmaking in Africa, South America, the Indian subcontinent, and Asia; and technological innovations such as CGI. Major directors and their groundbreaking films are studied, as is the visual style of postmodernism. Note: Students may not receive credit for both this course and ENGL 205 Film History and Criticism.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 231 Contemporary African American Cinema (Gen. Ed. Domain III-C)

An introduction to representations of African American identity in Hollywood and independent film organized around three modalities: stars, directors, and stories. Set against the backdrop of advances in the Civil Rights movement, the course explores the emergence of major African American actors and filmmakers from the 1950s to the present. Students explore popular representations of Black life in America emphasized in selected films.
Prerequisite: Eligibility for ENWR 110 Composition II, or permission of instructor.

## ENGL 232 Irish Literature (Gen. Ed. Domain I-B)

A consideration of the development of Irish literature from its origins in myth, saga, and lyric through the twentieth century, with emphasis on the period from the Literary Revival in the late nineteenth century to the present. Among the writers covered are Swift, William Carleton, Maria Edgeworth, Thomas Moore, Yeats, Synge, O'Casey, Joyce and Beckett.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 233 American Multi-Ethnic Young Adult Fiction (Gen. Ed. Domain I-B)

A study of multi-ethnic young adult fiction in the United States since the 1960s. Through literary analysis and interpretation, students examine the social, cultural, and publishing conditions that have shaped a surge in diverse young adult fiction. Topics may include coming-of-age narratives and cultural traditions, identity, gender, friendship, family, and social justice.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 234 Global Cinema

An exploration of films from around the world within their unique cultural contexts. The course examines global films' styles and themes, analyzing their relationship to the social and political conditions that produced them. Topics vary each time the course is offered, focusing on an individual country, a region, a theme, a director, or a historical period.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 236 Desire and Power in Early Western Literature

Designed to introduce students to literary history from diverse socio-cultural positions in ancient, medieval, and early modern Europe. Students explore intersections of passion and politics in works from authors such as Sappho, Ovid, Virgil, Dante, Christine de Pizan, and Ronsard. Throughout, students examine how writers respond to dominant power structures.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 238 Environmental Literature (Gen. Ed. Domain I-B)

An introduction to nineteenth- and twentieth-century British and American literature exploring the place of human beings in the natural world. Topics may include society's increasing estrangement from the natural world, the historic shift from nature as a place of personal renewal to an imperiled entity in need of preservation, and the ongoing tension in environmental literature between contemplative escapism and political activism. Readings may include essays, memoir, or fiction by writers such as Gilbert White, Henry David Thoreau, John Muir, Mary Austin, Rachel Carson, Edward Abbey, and Annie Dillard.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 240 LGBTQ Literature (Gen. Ed. Domain III-B)

An introduction to twentieth- and twenty-first century American and British lesbian, gay, bisexual, transgender, and queer literature. The course examines the social, political, and cultural conditions which have shaped LGBTQ literature. Themes may include self-discovery, coming out as LGBTQ, family and relationships, and confronting discrimination. Writers may include E. M. Forster, Truman Capote, James Baldwin, Audre Lorde, Adrienne Rich, Jeannette Winterson, Leslie Feinberg, and Dorothy Allison.
Prerequisite: ENWR 110 Composition II.

## ENGL 242 The Graphic Novel (Gen. Ed. Domain I-B)

An introduction to the academic study of comics and graphic novels. Texts ranging from superhero stories to comics theory, from personal memoir to war reporting, illuminate the relationship between verbal and visual storytelling, the use of comics form for truth-telling, and the evolving status of comics and graphic novels as popular and high art. Course work emphasizes core analytical skills, including critical thinking, literary analysis and research.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 243 The American Short Story (Gen. Ed. Domain I-B)

A survey of the short story in America from Irving, Poe, and Hawthorne to the present with emphasis on writers who reflect various regions, cultures, and ethnic groups.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 246 African American Film

An historical survey of African American films from the early twentieth century to the present. Films made by African Americans are studied in the context of their engagement with social issues and dialogue with Hollywood conventions. Filmmakers may include Oscar Micheaux, Gordon Parks, Charles Burnett, Spike Lee, Leslie Harris, John Singleton, Kasi Lemmons, Steve McQueen, and Ava DuVernay.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 248 Literature of the Harlem Renaissance (Gen. Ed. Domain III-C)

A survey of the literature of the Harlem Renaissance, focusing on social, political, and cultural contexts as well as literary innovations and intersectional depictions of racial and gender identities by the authors studied. Readings may include memoirs, criticism, poetry, fiction, or drama by authors such as Marita Bonner, Countee Cullen, W.E.B. DuBois, Zora Neale Hurston, Langston Hughes, Nella Larsen, Claude McKay, and Jean Toomer.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 251 British Literature I: Old English to 1680

A chronological study of British literature that focuses on representative works and authors through 1680. Readings include Beowulf, selections from Chaucer's The Canterbury Tales, one Shakespeare play, and selections from other writers such as Malory, Spenser, Sidney, Donne, Cary, and Milton. Works are explored in the context of the literary, cultural, and historical milieu in which they were produced.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 255 British Literature II: 1680-1890

A chronological study of British literature from the Restoration to the Late Victorian period that focuses on representative works and authors. Readings include selections from such writers as Behn, Swift, Johnson, Wordsworth, Coleridge, Austen, Byron, the Brontes, Shelley, Keats, Tennyson, Arnold, Browning, and George Eliot. Works are explored in the literary, cultural, and historical milieu in which they were produced.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 260 American Ethnic Literature (Gen. Ed. Domain III-C)

A study of Native American, African American, Asian American, Hispanic American, and other ethnic writers. The course explores issues of individual and collective identity, as well as the tension between assimilation and ethnic affirmation in the works of writers throughout American history. Note: Students who have taken 21.260 Minority Literature will not receive credit for this course. Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 261 American Writers I (Gen. Ed. Domain I-B)

A survey of literature from the age of European exploration to the middle of the nineteenth century. The course reflects the diversity and range of American experience. Readings may include letters and journals of early discoverers, explorers, and settlers; selections from the Native American oral tradition; essays by Ralph Waldo Emerson, Margaret Fuller, and Henry David Thoreau; autobiographies by Frederick Douglass and Harriet Jacobs; and poetry and fiction by writers ranging from Anne Bradstreet to Herman Melville.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 262 American Writers II (Gen. Ed. Domain I-B)

A survey of literature since the middle of the nineteenth century. The course reflects the diversity and range of American experience. Readings may include memoirs, criticism, poetry, fiction, or drama by authors such as Emily Dickinson, Mark Twain, Willa Cather, T.S. Eliot, William Faulkner, Tennessee Williams, and James Baldwin.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

ENGL 263 African American Women Writers (Gen. Ed. Domain III-C)
An historical survey of African American women writers from the eighteenth century to the present. This course is designed to introduce students to the ways in which African American women writers from a variety of locations and time periods wrestle with constructions and intersections of race, gender, nation, and class. This course focuses on close reading and discussion of representative works in various genres by such writers as Phillis Wheatley, Harriet Jacobs, Nella Larsen, Zora Neale Hurston, Rita Dove, Toni Morrison, and Alice Walker.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 264 African American Literature (Gen. Ed. Domain III-C)

A study of the fiction and non-fiction of African Americans throughout American history, including characteristic literary forms such as the slave narrative, autobiography, and song. The course focuses on such writers as Wheatley, Douglass, Jacobs, Washington, DuBois, Hurston, Toomer, Hughes, Baldwin, Wright, Ellison, King, Malcolm X, Walker, Morrison, and Wilson.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 266 Western Literature: Renaissance to the Present

A study of great continental writers of western civilization from the Enlightenment to the present. Representative selections from such writers as Voltaire, Rousseau, Goethe, Dostoevsky, Flaubert, Tolstoy, Ibsen, Kafka, Mann, Camus, and Duras are studied. Note: ENGL 265 Western Literature: Origins to the Renaissance is not a prerequisite for this course.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 271 Development of the Drama

A study of the drama as an art form from its genesis in classical antiquity through its most recent expressions. Representative plays illustrating this development are read and discussed and students are encouraged to prepare selected scenes for class presentation. Related topics touched on include history of the theater and the literature of dramatic criticism.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 275 Contemporary Latinx Literature (Gen. Ed. Domain I-B)

An introduction to Latinx literature in the United States since 1960. The course examines the social, political, and cultural conditions which have shaped Latinx literature. Themes may include defining what it means to be American, language and identity, and aesthetic innovations. Writers may include Rudolfo Anaya, Gloria Anzaldúa, Sandra Cisneros, Julia Alvarez, Junot Díaz, Esmeralda Santiago, and Justin Torres.
Prerequisite: ENWR 110 Composition II.

## ENGL 277 Gender in Contemporary Global Literature (Gen. Ed. Domain III-B)

An examination of international late twentieth and early twenty-first century texts that engage gender issues in cross-cultural contexts. The course employs a variety of critical approaches such as feminism, postcolonialism, queer theory, and gender studies.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 280 Persuasive Writing

An introduction to effective persuasive writing for public audiences. Students study rhetorical principles and examples of persuasive writing and develop their own projects which may include oped columns, blog writing, and policy proposals. At least one project is sent directly to its intended public audience. Particular attention is paid to ethical rhetorical practices.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 282 Creative Writing (Gen. Ed. Domain I-A)

A study of the methods and techniques of creative writing, with emphasis on the variety of forms used in contemporary literature. Students are encouraged to experiment both in prose and poetry in order to develop new strategies to express their experiences and feelings. Students read manuscripts in class.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 284 Writing Fiction and Creative Nonfiction (Gen. Ed. Domain I-A)

A study in which students read and write both fiction and creative nonfiction and consider how the genres inform each other. Students give and receive feedback on work in progress. Students also engage in writing exercises and read related essays on questions of craft. Types of writing may include the short story, the personal essay, and writing about travel, food, nature, and society.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 286 Professional Writing

A career-oriented course introducing students to a wide variety of writing formats used in business, government, and the professions. Assignments may include resumes, employment documents, letters and memos, short proposals, a variety of report formats, public relations and advertising documents, and basic technical writing. This course emphasizes drafting, critiquing, rewriting, and editing, as well as collaborative writing and presentation skills.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 297 English Grammar: A Structural Analysis

An intensive analysis of the theory and practice of English grammar. The effects of syntactic structure upon meaning in such phenomena as dependent clauses, prepositional phrases, nouns and verbs, subjects, objects, and modifiers are explored in order to understand a grammatical description of English.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 300 Writing for Children

An advanced writing workshop in the methods and techniques of writing for children. Students compose poetry, fiction, and prose for readers in grades Pre-K through 12. Activities include analysis of children's literature and group critiques of students' work.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 301 Chaucer in Context: More than Middle English

An exploration of Chaucer's imaginative adaptations of classical and medieval myth, fables, and philosophy, as well as diverse socio-political and cultural conflicts arising from the Hundred Years' War, "The Woman Question," plague, and more. Students are introduced to Chaucer's use of the English language and read his works in lightly modernized translations. Note: Credit will not be given to both this course and ENGL 407 Chaucer.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 310 Composition Theory and Pedagogy

A survey of major historical and contemporary theories in composition scholarship, including cognitivism, expressivism, social construction, and post-process theory, as well as their pedagogical applications. Assignments focus on characteristics of effective writing and writing instruction. The course provides students with background knowledge on the relationship between writing, rhetoric, reading, and English grammar. Note: This course cannot be used to fulfill the department requirement for four literature courses at the 300-level or above.
Prerequisites: Junior standing and ENGL 204 Literary Study, or permission of the instructor.

## ENGL 311 Writing About Science

An advanced course focused on writing about science for experts and lay audiences. Students study the purposes, audiences, and conventions of published scientific research and articles about science in popular publications and apply that understanding in their own writing. Projects may include reports, nonfiction essays, and scientific journalism. Particular attention is paid to collaboration and ethics, as well as the work of science writing professionals. Completion of or concurrent enrollment in a lab science is recommended.
Prerequisites: ENWR 110 Composition II and Sophomore status; or permission of the instructor.

## ENGL 314 English Renaissance Literature

The study of sixteenth and seventeenth-century authors who created a new national literature out of classical, continental, and native traditions. Through varying topics and study of such authors as Greene, Spenser, Sidney, Lanyer, Jonson, Wroth, Bacon, Donne, and Milton, students explore literary and cultural contexts for a rich array of genres, including lyric, romance, pastoral, essay, and allegory.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 317 Studies in Shakespeare

An exploration of a special topic in Shakespearean drama, focusing on a theme, a genre, or a particular literary, social, or political context in selected plays. Shakespeare is studied as a poet, playwright, and thinker. Topics, which change every year, include Shakespeare on Film, Shakespearean Families, Gender and Genre in Shakespeare, Shakespeare's Dramatic Imagery, and Shakespeare's Tragic Heroes.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 318 British Romanticism

A critical and historical study of romanticism in English literature. Concentration is on the major poets: Wordsworth, Coleridge, Byron, Shelley, and Keats.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 319 The Nineteenth-Century European Novel

A study of the nineteenth-century European novel which includes works from a variety of authors throughout the century such as Dostoyevsky, Flaubert, Goethe, Hugo, Sand, Stendhal, Tolstoy, and Zola.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 320 Young Adult Literature

A study of literature for young adults ages 12 and up. The course investigates the development of a young adult canon through examination of classic and contemporary works including graphic novels, poetry, and a variety of fictional genres, such as realism, fantasy and science fiction. Students explore the aesthetic developments of young adult literature, its historical and cultural contexts, and its expression of philosophical ideas of adolescence. Note: Students may not receive credit for both this course and ENGL 219 Young Adult Literature.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 322 The Nineteenth-Century British Novel

A study of the nineteenth-century British novel, including works form a variety of authors through the century, such as the Brontes, Dickens, George Eliot, Gissing, and Hardy.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 325 Studies in Film

An exploration of a special topic in film. Topics, which change each time the course is offered, include the study of an individual director's body or work, classical or contemporary film theory, or a specific period in film history.
Prerequisite: Completion of Gen. Ed. Domain 1 and one of the following film courses: ENGL 206 Film and Literature, ENGL 207 The Language of Film, ENGL 208 Film Genres; ENGL 209 Film History: 1895 to 1960; ENGL 229 Film History: 1960 to Present; or permission of instructor.

## ENGL 326 The Novel and the World

A study of twentieth and twenty-first century novels from outside the U.S. and Europe. The course explores responses to the European and the American novel as well as innovations that emerge from local traditions. Readings may draw from Africa, the Indian subcontinent, South America, Asia, the Middle East, Australia, and the Caribbean and novelists may include Chinua Achebe, Arundhati Roy, Gabriel García Márquez, Mo Yan, Naguib Mahfouz, Keri Hulme, and Patrick Chamoiseau. Some novels may be read in translation.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 330 The Victorian Period

A study of British poetry and prose (exclusive of the novel) from the 1830's to the end of the nineteenth century with emphasis on forces and influences that have helped to shape the present. Historical and social backgrounds of the literature; major philosophical ideas and conflicts; aesthetic developments; relationships with America and continental Europe.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 331 News Writing

A rigorous examination of news writing with emphasis on accuracy, journalistic conventions, and deadlines. Students cover a variety of news events. The course explores the question "What is News?" and such issues as libel, privacy, the right to know, and freedom of information. May be used to fulfill the requirements for the English major.
Prerequisite: ENGL 225 Introduction to Journalism.

## ENGL 333 Critical Writing

An advanced writing course designed to foster theoretically informed textual analysis. The course includes extensive study of literary theory, research, and writing about a variety of works.
Prerequisite: Completion of ENGL 204 Literary Study and two additional literature courses or permission of the instructor.

## ENGL 335 Feature Writing

A course which emphasizes writing the feature story for newspapers and magazines. This course develops the skills to recognize a news peg that can be expanded into a feature, and studies the growth in the use of features within print journalism.
Prerequisite: ENGL 225 Introduction to Journalism.

## ENGL 337 Victorian Hauntings

An exploration of the ways in which Victorian ghost stories and supernatural literature reflect the growing apprehension that Victorians felt in response to rapidly shifting cultural boundaries, such as changes in religion, new scientific theories, and advancing technology. Examining the Victorian fascination with the spectral encourages students to consider the ways in which our contemporary culture's obsession with the supernatural may mark a similar discomfort with fast-paced social change.
Prerequisites: ENGL 204 Literary Study or permission of the instructor.

## ENGL 338 Grant Writing

Designed to provide students with tools, resources, and strategies for grant writing. Topics include researching funding sources, understanding applications and requests for proposals, preparing full proposal packets, and critiquing proposals. Projects may include grants for nonprofit operations and programming, individual artist projects, and small business startups.
Prerequisite: Completion of Common Core Writing Requirement (ENWR 110 Composition II) and junior status.

## ENGL 342 Modern Drama

An examination of methods and types of modern continental, British, and American drama. Critical reading and discussion of plays by such writers as Ibsen, Chekhov, Pirandello, Anouilh, Ionesco, Shaw, Miller, Williams, and Albee.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 346 Contemporary African Literature

A survey of literary traditions across a range of African countries during the twentieth and twentyfirst centuries. Authors may include Chinua Achebe, Ngugi Wa Thiong'o, Chimamanda Adiche, J.M. Coetzee, Yvonee Vera, Wole Soyinka, and Bessie Head. Note: Students cannot receive credit for both this course and ENGL 398 Studies in Contemporary Global and Postcolonial Literature.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 347 Modern American Poetry

A study of modern American poets, such as T.S. Eliot, Robert Frost, Langston Hughes, Marianne Moore, Ezra Pound, and William Carlos Williams. Attention is given to theories about the form of modern poetry and its function within historical and cultural contexts.
Prerequisite: ENGL 204 Literary Study or permission of the instructor.

## ENGL 349 Writing Poetry

An advanced workshop in reading and writing poetry, with an emphasis on personal expression, free verse technique, and contemporary adaptations of traditional forms.
Prerequisite: ENGL 282 Creative Writing or permission of the instructor.

## ENGL 355 British Fiction since 1945

A study of British fiction since the end of World War II. Major topics may include postwar recovery; the end of the Empire; shifting definitions of literary tradition; regional British fiction; changing understandings of what it means to be English; London as the site of transnational encounters; postmodern experimentation and literary form; and approaches to realism in contemporary British fiction.
Prerequisites: ENGL 204 Literary Study or permission of the instructor.

## ENGL 356 Contemporary Literature from the Islamic World

A survey of contemporary literature set in a range of Muslim-majority nations during the twentieth and twenty-first centuries. Authors may include Naguib Mafouz, Orhan Pamuk, Malika Mokedeem, Moshin Hamid, Salman Rushdie, Tahmina Anam, and Marjane Satrapi. Note: Students cannot receive credit for this course and ENGL 398 Studies in Contemporary Global and Postcolonial Literature.
Prerequisite: ENGL 204 Literary Study or permission of the instructor.

## ENGL 361 Postcolonial Literature

A study of postcolonial literature by authors with cultural roots in South Asia, Africa, the Caribbean, and other former colonies that achieved independence in the second half of the twentieth century. Readings may include Commonwealth literature from Australia, New Zealand, and Canada; translated texts; and postcolonial criticism.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 363 Writing Fiction

An advanced workshop in reading and writing short fiction with an emphasis on writing from personal experience; use of traditional and contemporary forms; and developing narrative voice, characters, plot, and setting.
Prerequisite: ENGL 282 Creative Writing or ENGL 284 Writing Fiction and Creative Nonfiction; or permission of the instructor.

## ENGL 365 American Romanticism

A critical study of essays, novels, short stories, and poetry by some of the major American writers of the first half of the nineteenth-century. Through a consideration of writers such as Emerson, Thoreau, Hawthorne, and Poe, students explore the aesthetic developments and philosophical ideas expressed through the genre of Romanticism and its related movement, Transcendentalism. The cultural and historical background of the genre is also discussed.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 366 Contemporary African American Poetry

A study of contemporary African American poetry. Students consider such poetic subgenres as the historical poem, persona poem, and spoken word poem from such key groups as the Black Arts Movement and Cave Canem. Poets may include Amiri Baraka, Sonia Sanchez, Natasha Trethewey, Kevin Young, Claudia Rankine, and Tyehimba Jess.
Prerequisite: ENGL 204 Literary Study or ENGL 264 African American Literature, or permission of instructor.

## ENGL 368 American Realism and Naturalism

A critical study of works from the major American writers of the late nineteenth and early twentieth centuries, including such writers as Crane, Dreiser, James, Jewett, Twain, and Wharton. Emphasis is on the development of realism and naturalism, and on the historical, political, and cultural contexts of these literary movements.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 370 Studies in American Literature

An exploration of a special topic in American Literature. Topics change each time the course is offered; sample topics include such subjects as American Sea Literature, the Nineteenth-Century Domestic Novel, the American Dream and its Discontents, and Labor and American Literature. Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 372 Technical Writing

Designed to develop students' abilities to produce representative technical documents. Projects may include instructions, proposals, technical reports, procedures, tutorials, usability tests, and support websites. Students are introduced to writing for technical and non-technical audiences, as well as to conventions of technical writing and the basics of editing appropriate to technical contexts.
Prerequisite: ENWR 110 Composition II or permission of the instructor.

## ENGL 373 Modern American Fiction

An advanced study of major modern American writers such as Fitzgerald, Hemingway, Cather, West, Faulkner, Hurston, and Wright in the context of the historical and cultural developments of the first half of the twentieth century.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 375 Studies in British Literature through 1680

An exploration of a special topic in British literature through 1680. Topics change each time the course is offered and may include such subjects as The Idea of the Garden in Chaucer, Spenser, and Milton; Elizabethan and Jacobean Revenge Tragedy; Life Writing in Early Modern England; The Literature of Travel and Exploration; and Reading Milton's Paradise Lost.
Prerequisites: ENGL 204 Literary Study or permission of instructor.

## ENGL 376 The Twentieth-Century Novel

A study of major writers, ideas, and forms of the twentieth-century novel in Europe and America, with emphasis on the first half of the century. Close reading and discussion of representative works by such writers as Joyce, Hesse, Faulkner, Camus, and Bellow.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 377 Writing for Online and Social Media

Designed to develop students' abilities to craft a professional online presence and use social media platforms effectively to distribute news stories and other professional writing. Students create blogs, participate in social media, engage in crowd-sourcing, study the best practices in this online area and focus on a single area of interest, such as journalism and politics, education, or business and professional writing.
Prerequisite: One (1) journalism or professional writing course; or permission of instructor.

## ENGL 382 Contemporary European Literature

An examination of ideas, trends, and forms in recent literature from Europe, as well as recent works reflecting European consciousness from elsewhere in the world. The course begins with "classic" mid-twentieth century authors such as Beckett and Camus, and moves to writers who came to prominence more recently, such as Berger, Calvino, Coetzee, Duras, Handke, and Kundera. Note: Students will not receive credit for both ENGL 382 Contemporary European Literature and 21.379 Contemporary European and American Literature.
Prerequisites: ENGL 204 Literary Study or permission of instructor.

## ENGL 383 Contemporary American Fiction

A study of American fiction since 1945, including writers such as Bellow, DeLillo, Doctorow, Ellison, Morrison, Nabokov, Pynchon, Roth, Tyler, Updike, and Walker. Emphasis is on postmodern narrative experiments and on representations of the self and American experience in the contemporary period. Note: Students will not receive credit for both ENGL 383 Contemporary American Fiction and 21.379 Contemporary European and American Literature.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 384 Contemporary American Poetry

A study of contemporary American poetry from the mid-twentieth century to the present day. Students consider the work of poets from such key groups as the Confessionals, New York School, Beats, Black Arts, and slam poets. Students employ close reading in form and genre, explore biographical and historical contexts, and apply critical theory.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 386 Studies in British Literature after 1680

An exploration of a special topic in British literature after 1680. Topics change each time the course is offered and may include subjects such as the British novel, British poetry from the Romantics to the present, British modernism, and diasporic London.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 387 Life Writing

A creative writing workshop emphasizing biographical and autobiographical narratives. Types of writing may include personal essays, journals, memoirs, profiles, obituaries, and lyrics. Students consider and practice the literary options available to the writer of biographical and autobiographical material.
Prerequisites: ENGL 282 Creative Writing or ENGL 284 Writing Fiction and Creative Nonfiction or permission of instructor.

## ENGL 389 Modern and Contemporary British and Irish Poetry

A study of poets writing in Britain and Ireland since 1890. The course examines approaches to literary tradition and poetic form in the context of the upheavals of the twentieth- and twenty-first centuries. Authors may include Gerard Manley Hopkins, W.B. Yeats, W.H. Auden, Stevie Smith, Dylan Thomas, Seamus Heaney, Alice Oswald, and Eavan Boland.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 390 Studies in Genre

An advanced exploration of a single literary genre, such as the novel, non-fiction prose, poetry, or drama. A broad range of literary texts along with contextual documents and works of literary theory are examined.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 397 Studies in African American Literature

An exploration of a special topic in African American literature. Topics change each time the course is offered and may include classic and contemporary slave narratives, literature of the American Civil Rights Movement, African American drama since 1945, and the novels of Toni Morrison.
Prerequisite: ENGL 204 Literary Study or ENGL 264 African-American Literature, or permission of instructor.

## ENGL 398 Studies in Contemporary Global and Postcolonial Literature

An examination of a special topic in global and postcolonial literature. Works discussed may include those in English or in translation. Topics vary and may include literature from the Caribbean, the Middle East, and the Indian subcontinent, as well as postcolonial feminist literature, transnational literature, and international human rights literature.
Prerequisite: ENGL 204 Literary Study or permission of instructor.

## ENGL 399 Current Trends in Children's Literature

A theoretically informed study of current books for children and young adults, with particular emphasis on literary developments, publishing and marketing trends, and recent academic debates. Students will consider the social, technological, and professional contexts in which children's books are created, evaluated, and marketed. Note: This course does not satisfy the requirement of a 300level literature course for the English major.
Prerequisite: Completion of one 200-level children's literature course or permission of the instructor.

## ENGL 401 The English Language

A study of the ancestry of English, of the processes and results of change in sound, form, and meaning. The classification of languages, social and regional dialects, theories of language acquisition, and other topics are examined to give the student a general understanding of modern developments in linguistics. Note: This course is recommended for students planning graduate study in English.

## ENGL 411 Creative Writing Seminar in Prose

A capstone prose writing workshop for students who have experience in writing fiction and/or creative nonfiction and who now wish to complete extended projects or work on new material. Classes are devoted to discussion of student work and notable published works of short fiction and creative nonfiction.
Prerequisites: ENGL 363 Writing Fiction or ENGL 387 Life Writing or permission of instructor.

## ENGL 413 Creative Writing Seminar in Poetry

A capstone poetry writing workshop for students who have experience in writing poetry and who now wish to complete extended projects or work on new material. Classes are devoted to discussion of student work, notable poetry, and poetic forms.
Prerequisites: ENGL 349 Writing Poetry, or permission of instructor.

## ENGL 422 Seminar in Literature

The capstone experience for the English major. Seminar instructors choose topics and primary texts connected by period, genre, theme, or author. Drawing on skills gained throughout the major, students develop historical and cultural contexts for the texts; apply a variety of critical theories, approaches, and methodologies; give oral reports; and write a substantial, theoretically informed research essay on a subject related to the seminar's topic.
Prerequisites: English major of senior standing with eight course credits in English, including ENGL 204 Literary Study and two literature courses at the 300 level. Second-semester juniors may only take the course with permission of the instructor and the Chair of the English Department.

## ENGL 481 Editorial Workshop in Journalism

An intensive course in news, feature and editorial writing, as well as copy editing and newspaper management. Students gain hands-on experience working on The Gatepost. This course does not fulfill requirements for the English major.
Prerequisites: ENGL 225 Introduction to Journalism and either ENGL 331 News Writing or ENGL 335 Feature Writing, and a GPA of 3.00 in previous journalism courses; or permission of the instructor.

## ENGL 490 Independent Study in English

An independent study supervised by a member of the English Department and offered to juniors and seniors. The independent study may, but need not, be done as an honors project under the jurisdiction of the Honors Committee. It counts as one course in the student's program and may not substitute for the Seminar in Literature.

## ENGL 495 Internship in English

A supervised practical experience in an approved professional setting requiring writing. A substantial portfolio of written and edited material and a final report on the experience are required. The internship is open only to students majoring in English OR to students minoring in professional writing, creative writing, writing, or journalism. Arrangements must be made during the semester before the beginning of the internship and approved by the Chair of the English Department.
Prerequisites: Junior status and at least two (2) writing courses (see list of writing and journalism courses approved for the major), one of which must be a professional writing or journalism course; or permission of the Internship Coordinator.

## ENGL 496 Internship in Journalism

A supervised field experience in an approved professional setting such as a newspaper or magazine or an online site. A substantial portfolio of published articles and a final report on the experience are required. The internship is open only to students majoring in English with a concentration in journalism and a 3.00 GPA in the major OR to students minoring in journalism with an average GPA of at least 3.00 in their journalism courses.
Prerequisites: Junior status and ENGL 225 Introduction to Journalism, and two (2) of the following: ENGL 331 News Writing, ENGL 335 Feature Writing, ENGL 377 Writing for Online and Social Media, ENGL 481 Editorial Workshop in Journalism. Approval by the Chair of the English Department must be obtained during the semester before the beginning of the internship.

## ENGLISH WRITING COURSES

## ENWR 100 Composition I with Writing Studio

Preparation for ENWR 110 Composition II and college-level reading. This course guides students through strategies for reading non-fiction texts written for broad audiences. Students critically engage with the language and ideas in those texts as they develop thesis-driven essays using appropriate summary, quotation, paraphrase, and citation. Students engage a range of audiences and purposes as they develop strategies for managing writing and revision processes. This course requires an additional 1-hour per week Writing Studio. Note: Successful completion of this course with a grade of C- (1.70) or higher is required before entering ENWR 110 Composition II. Credit is given for this course only if taken before ENWR 110 Composition II.
Prerequisite: Writing Placement Code of 0.0 to 2.1.

## ENWR 105 Composition I

Preparation for ENWR 110 Composition II and college-level reading. This course guides students through strategies for reading non-fiction texts written for broad audiences. Students critically engage with the language and ideas in those texts as they develop thesis-driven essays using appropriate summary, quotation, paraphrase, and citation. Students engage a range of audiences and purposes as they develop strategies for managing writing and revision processes. Note: Successful completion of this course with a grade of C- (1.70) or above is required before entering ENWR 110 Composition II. Credit is given for this course only if taken before ENWR 110 Composition II.

Prerequisite: Writing Placement Code of 2.3.

## ENWR 110 Composition II (Gen. Ed. Common Core)

Preparation for researching and writing thesis-driven academic essays. This course guides students through strategies for locating and reading scholarly articles and advanced non-fiction essays. Students critically engage with complex language and ideas as they develop arguments using sources appropriately. Students focus on academic audiences and purposes as they develop strategies for managing writing and revision processes. The course includes writing a substantial well-researched and documented paper. Note: Credit will not be given for this course and either ENGL 110 Expository Writing or ENGL 102 Essentials of Writing. Entering students must complete this course within their first three (3) semesters.
Prerequisite: English Writing Placement score of 3.0 to 5.0 ; or a grade of C- (1.7) or higher in either ENWR 100 Composition I with Studio or ENWR 105 Composition I.

## ENTRPRENEURSHIP COURSES

## ENTR 300 Entrepreneurship: Starting Your Business

A study of the challenges and opportunities of starting a business. Students adopt the tools necessary to design and develop a new business and engage their creative thinking capabilities. Students develop a business plan which brings together the marketing, operations, management, funding, accounting and legal aspects of business start-ups. Real world entrepreneurs in different fields such fashion design and retailing, information and technology, and computer science may be featured as guest speakers. Student readings include books on start-up tools, cases, as well autobiographies of several successful entrepreneurs.
Prerequisites: ENWR 110 Composition II, Math Core, and Sophomore Standing.

## ENTR 301 Cultivating and Managing Innovation

An exploration of factors that support successful innovations. Students seek answers to the following questions: What drives successful innovations? How is innovation best spurred within organizations? What techniques are best in managing in innovative organizations? Why are some regions like Massachusetts able to stay more innovative over time? These questions, and others, are addressed in this course designed to help students be creative in their jobs, inspire start-ups, and/or manage people and teams charged with being innovative. The course explores where good ideas come from, and exposes students to the breakthrough practices of companies and regions. Students learn how to locate and evaluate resources. Case studies focus on recent inventions. Students also consider social innovation and the venture philanthropy approach. Massachusetts innovators may give guest lectures. Students may learn, or improve, their skills in how to make presentations based on research. Prerequisites: ENWR 110 Composition II, Math Core, and Sophomore Standing.

## ENTR 302 Social Entrepreneurship

A study of starting, and/or working in, an entrepreneurial organization to meet a social need whether globally or in the United States. What are key steps and challenges for the student in learning how to make this happen? Hybrids, poverty, sustainability, venture philanthropy, healthcare are all part of what a student needs to understand to challenge convention, and help make changes small and large. Social enterprises in Massachusetts as well as globally are considered and analyzed as case studies. Guest speakers with social entrepreneur experience locally and, perhaps globally give guest lectures to help develop student understanding on the national and global social entrepreneur issues. Students explore the connection of social enterprises to Corporate Social Responsibility (CSR) programs. Projects and business plans are developed by students as part of the assessment.
Prerequisites: ENWR 110 Composition II, Math Core, and Sophomore Standing.

## ENTR 495 Entrepreneurship Internship Practicum

A supervised practical experience in the Framingham State University Entrepreneur Innovation Center. Students are required to attend a seminar component to discuss relevant readings and experiences. Internship tasks vary based upon activities in the lab and may include idea formulation and revision, fundraising/finance, working with lawyers on Intellectual Property, family businesses, and expansion of a mini-business plan into a full business plan. Each student works with the instructor one-on-one on a regular basis in a parallel process to the seminar to set up, implement, and review specific projects with entrepreneurs. Interested students must complete an application process prior to the end of the previous semester.
Prerequisites: Sophomore Standing and approval of instructor.

## ENVIRONMENTAL SCIENCE COURSES

## ENVS 101 Introduction to Environmental Science and Policy

A comprehensive survey of the principles concerning the interactions of humans and their environments. The scientific foundations and the policy implications of population growth, natural resources, pollution, and agriculture are examined in the context of present capabilities and the prospects for future development. The course also considers the ways in which marginalized communities, including indigenous communities, are disproportionally impacted by current environmental policy-making.
Prerequisites: ENWR 110 Composition II (may be taken concurrently) and one (1) credit bearing math course (may be taken concurrently).

## ENVS 202 Data Analysis for Scientists

A comprehensive study of how to use powerful statistical tools to prepare, analyze, interpret, and visualize data collected in the physical, biological and environmental sciences. Practical and applied analyses are emphasized, using case studies and critical assessment of the use of statistical methods in published literature. Topics include design of experiments, univariate distributions, exploratory data analysis, inferential statistics and hypothesis testing, linear and generalized linear models, and time-series analysis, using open-source statistical software. Non-parametric analyses and careful consideration of confidence intervals are emphasized.
Prerequisite: Completion of the math core requirement or the eligibility to enroll in MATH 180 Precalculus.

ENVS 218 Energy Science and Policy: The Pursuit of Sustainability
An exploration of the scientific principles of thermodynamics, and the ways in which physical limits intersect with economic and political considerations in order to shape energy policy, both in the United States and elsewhere. The course investigates the nature of energy and its historical contexts, including sources of energy, their costs and benefits, and the by-products of energy extraction and use. Special attention is given to the costs of energy production and use that are borne disproportionally by under-represented populations. Emerging alternative energies and their political, economic, and social potentials are also examined.

## ENVS 272 Global Environmental Issues

A survey of the pressing environmental problems threatening the survival of human society and planetary ecological systems, and the social, economic, and environmental costs of these problems, especially for people in marginalized communities and people in less-developed countries. In addition to anthropogenic climate change, issues covered include: ozone depletion, deforestation, loss of biodiversity, acid rain, desertification, marine pollution, shortages of clean water, and e-waste. The course frames these environmental problems in relevant economic, cultural, and geopolitical contexts, and considers various proposals for positive change, including technological innovations and changes through governance at multiple scales.
ENVS 300/300L Environmental Science Field Methods with Lab (1.25 Course-credits) An introduction to field methods used in earth and environmental sciences fieldwork for data collection and reliable scientific observations. The course allows students to learn and apply a number of field skills including basic surveying (compass, transit, level and GPS use); soil, mineral and rock description and classification; geological mapping; sampling and analysis methods for water discharge and quality; snow pit analysis; and map, air photo and satellite interpretation. Students develop professional field reports and develop their own field program to address a specific earth or environmental science problem. Students are required to enroll in the corresponding laboratory ( 3 hours).
Corequisite: ENVS 300L Environmental Science Field Methods Lab.
Prerequisite: ENVS 101 Introduction to Environmental Science and Policy, GEOL 208 Principles of Physical Geology, and GEOL 233 Environmental Geology; or permission of instructor.
Corequisite: ENVS 300L Environmental Science Field Methods Lab.

## ENVS 333 Digital Field Methods: Drones, Data, \& Artificial Intelligence

An innovative approach to combining traditional environmental field methods with the power of unmanned aerial vehicles (UAVs), thermal cameras, geographic information system (GIS) software, and open-source machine learning, in order to estimate species populations in the field. Students study and practice the key integration and operational steps needed to conduct field-based population studies using modern drone technology. Students use flight planning software to plan surveys optimized to boundary conditions; use the open source Python language, implemented through Jupyter notebooks, to train machine-learning software; translate the results to a spatial data management system; and communicate the results through written and oral work.
Prerequisites: CSCI 130 Computer Science I using Java or CSCI 156 Python Programing for Applications and one (1) of the following: BIOL 109/109L Introduction to Biological Science with Lab, BIOL 130/130L Principles of Biology with Lab, BIOL 135/135L Foundations of Biological Science with Lab, ENVS 101 Introduction to Environmental Science and Policy, GEOG 111 Visualizing Social and Environmental Justice, or GEOG 216 Introduction to Geographic Information Systems; or permission of instructor.

## ENVS 451 Senior Thesis in Environmental Science I ( 0.5 course-credit)

The first of the two-semester Environmental Science Capstone series required of all Environmental Science majors. In this course students apply the methods of scientific inquiry by developing an original research proposal. Topics discussed include: scientific method, problem definition, literature survey, resource bibliography, scientific writing, oral presentation skills, research design, and statistical data analysis. A final grade of C - in this course is required in order to register for the second-semester course ENVS 450.
Prerequisites: ENVS 101 Introduction to Environmental Science, CHEM 103 Introductory Chemistry, ENVS 202 Data Analysis for Scientists, at least two (2) 200-level science courses, one (1) 200 -level policy course, completion or concurrent enrollment in GEOG 375 Resource Management, and minimum cumulative QPA of 1.70 in all courses required for the Environmental Science major.

## ENVS 452 Senior Thesis in Environmental Science II ( 0.5 course-credit)

The second of the two-semester Environmental Science Capstone series required of all Environmental Science majors. In this course students complete their original research project by acquiring, analyzing, summarizing, and interpreting their data in both a written thesis and an oral presentation to the campus community.
Prerequisite: Completion of ENVS 451 Senior Thesis in Environmental Science I with a minimum grade of C- (1.70).

## ENVS 495 Internship in Environmental Science and Policy

A supervised practical experience in a public or private agency, appropriate to the students training and interests. The internship program is offered through cooperation of participating institutions that provide guidance for the interns. A minimum of 160 on-site hours is necessary to complete the internship in Environmental Studies. The 160 hours must be completed within one semester. The internship in Environmental Science may be taken for one (1) course-credit in the major as a free elective. A student may not enroll in an internship more than twice (two (2) course-credits). Admission to this course must be approved by the Environmental Science Committee of the Geography and Biology Departments. Application due by October $15^{\text {th }}$ for spring semester and February $15^{\text {th }}$ for fall semester. Open to Environmental Science majors only.
Prerequisites: Senior standing, two semesters completed at Framingham State University, overall GPA of 2.75 with a 2.75 average in courses for the major.

## ENVIRONMENT, SOCIETY, AND SUSTAINABILITY COURSES

## EVSS 110 Introduction to Environmental Studies and Social Justice

(Gen. Ed. Domain III-B)
An examination of how societies make choices about sustainability and environmental policy. The conditions that have framed sustainability in the United States are explored through political, economic, ethical, social justice, and scientific lenses. Particular attention is paid to the struggles of dispossessed and marginalized communities to achieve environmental justice. Critical analysis of specific environmental issues such as siting of locally unwanted land uses, toxic waste sites, air pollution, and over-fishing, are used to understand environmental policies and the many variables that affect these policies. Note: Students may not receive credit for both this course and GEOG 135 Introduction to Environmental Studies.

## EVSS 460 Thesis in Environment, Society, and Sustainability

A synthesis of the undergraduate major experience for students in the Environment, Society, and Sustainability Department. Students work on independent research projects under faculty supervision, scaffolded by instruction in such topics as preparation of literature reviews, laboratory techniques, geospatial techniques, fieldwork skills, experimental design, data analysis, and scientific communication. Open to students in the Environment, Society, and Sustainability Department only. Content and assignments vary by semester to meet the needs of enrolled students.
Prerequisite: Senior standing.

## EVSS 490 Independent Study in Environment, Society, and Sustainability

An opportunity to study a topic in greater depth or to explore topics or problems in environment, society, and sustainability that are new to the student. The student must present a written proposal to the chair of the department. Note: This course is open only to students who are majors in the Department of the Environment, Society, and Sustainability.
Prerequisites: Junior standing; overall GPA of 2.70. Approval by the supervising faculty member and the department chair.

## EVSS 495 Internship in Environment, Society, and Sustainability

A supervised practical experience in a public or private agency, appropriate to the student's training and interests. The internship program is offered through cooperation with participating institutions that provide guidance for the interns. A minimum of 160 on-site hours is necessary, and must be completed within one (1) semester. The student must record the work done during the internship in the form of journal entries and/or a final paper or presentation as determined by the FSU supervising faculty and department chair. A student may take up to two (2) separate internship experiences. Prerequisites: Junior standing, two (2) semesters completed at Framingham State University, overall GPA of 2.75 with a 2.75 GPA in courses for the student's major, and approval of the Department Chair.

## FASHION DESIGN AND RETAILING COURSES:

## FASHION

## FSHN 110 Fashion: Designer to Consumer (Gen. Ed. Domain III-B)

An introductory study of the psychological, sociological, and economic theories of the fashion, apparel, and textile industries. Elements and principles of design are applied to all aspects of dress. The flow of the fashion, apparel, and textile industries are traced through the lifecycle, starting with design inspiration and ending with the consumer. Issues of sustainability and social responsibility in these industries are discussed.

## FSHN 120 Consumer Textiles

A study of the interrelationship of fibers, yarns, fabric structures, and finishes. Product suitability for end use, quality in relation to serviceability, and use and care problems are determined from fiber/fabric information. Textile identification, analysis, and testing procedures are explored within the context of environmental impact and sustainability.

## FSHN 208 Sustainability in the Fashion Industry (Gen. Ed. Domain III-B)

An exploration of the history and current practices and policies related to sustainability and social responsibility in the fashion industry. Students investigate the impacts of slow and fast fashion throughout a product's lifecycle and textile and fashion industry transparency with regards to societal and environmental impacts. Topics may include textile waste, ethical labor practices, and responsible sourcing. Practical and conceptual issues are discussed with the goal of integrating sustainable practices into daily and professional lives.

## FSHN 223 History of Costume (Gen. Ed. Domain III-A)

The study of costume from ancient Mesopotamia to the present. Costume is viewed as an integrated and characteristic expression of its period. The influence of social, political, technological, and economic conditions on costume is investigated through visual, audio, and written expression. This course examines fabrication, silhouette, color, and the aesthetics of people's costume through works of art and garments throughout history.

## FSHN 226 History of Textiles (Gen. Ed. Domain III-A)

The study of the evolution of fibers, fabric structures, design motifs, color processes, and finishing techniques. Textiles are studied in relation to culture, conquest, trade routes, and the Industrial Revolution. Present day fabrics are analyzed based upon their historical development.

## FSHN 229 Cultural Dress (Gen. Ed. Domain III-C)

An investigation of the dress of selected cultures. Textiles, garment shapes, and design adaptations are examined in relation to technology, geographic environment, social structure, political systems, and economic conditions.

## FSHN 245 Research Methods for the Fashion Industry

An analysis of concepts, constructs, models, and theories related to the fashion industry. Topics include the demographics and psychographics of target consumers. The theory, practice, and application of the research process in the textile, apparel, and retail industry are analyzed. Students compare research methods used in the fashion industry, including peer reviewed literature, and participate in a research project. Observations and computer data analysis are utilized.
Prerequisites: Sophomore status; FSHN 110 Fashion: Designer to Consumer.

## FSHN 250 Special Topics in Fashion

An exploration into an identified topic in the Fashion Design, Retail or Textile fields. Topics vary with instructor and reflect current trends or major themes in the areas of design, retailing, or textiles. Depending on the topic, students research and write a major paper and/or develop a collection of apparel designs and illustrations. NOTE: This course may be taken more than once for credit, provided a different topic is being examined.
Prerequisite(s): Vary with topic.

## FSHN 290 Study Tour: Fashion

A fashion design and merchandising course taught through on-site exposure to international or domestic fashion and retailing methods in addition to traditional methods of instruction, including pre and post-trip class meetings. Students learn from direct contact with fashion and retailing in a real-world context. The topics/ locations may vary from year to year and are announced in the course schedule bulletin. Note: This course may be repeated for credit if focused on both different topics and locations.

## FSHN 350 Special Topics in Fashion

An advanced exploration into an identified topic in the Fashion Design, Retail, or Textile field. Topics vary with instructor and include in-depth inquiry into current trends or major themes in the area of design, retailing, or textiles. Depending on the topic, students research and write a major paper and/or develop a collection of apparel designs and illustrations. NOTE: This course may be taken more than once for credit, provided a different topic is being examined.
Prerequisite(s): Vary with topic.

## FSHN 354 Advanced Textiles

The in-depth study of textile products, specialty fibers, and current development in the textile industry. The relationship of textile products to legislation, human and industrial needs, sustainability, and world political development is explored. Textile testing standards, specifications, and methods are studied and applied in a research project.
Prerequisite: FSHN 120 Consumer Textiles.

## FASHION DESIGN

## FSHD 140 Principles of Apparel Construction

A laboratory course in which students use slopers to produce completed garments. Emphasis is on materials selection, construction techniques, and quality standards. A notebook of basic assembly techniques is produced. Students with extensive construction experience may petition for exemption from this course. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## FSHD 205 Essential Methods for Fashion Design

An introduction to the visual communication of apparel design through technical flats and garment documentation. Students broaden their knowledge of garment terminology through garment analysis and illustration. Students practice using and developing digital and hand-drawn croquis templates to express clothing shape, construction, and details in the context of garment technical specification pages in Adobe Illustrator and spreadsheet software. Through inspirational research, line development, fabrication, and theme boards, students develop their own sense of style and ways of presenting their ideas in digital formats. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## FSHD 230 Advanced Apparel Construction

A laboratory course that focuses on advanced apparel construction methods. Emphasis is on construction and quality standards for complex apparel items. Completed garments are produced using self-drafted patterns and altered slopers. A notebook with examples of advanced techniques is developed. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: FSHD 140 Principles of Apparel Construction.

## FSHD 330 Digital Tools for the Fashion Industry

The study of professional digital illustration techniques used in the design and product development of apparel. Course work includes: interpreting and executing digital programs, including Adobe ${ }^{\circledR}$ Illustrator ${ }^{\circledR}$, to draw garment flat sketches and fashion illustrations; using digital tools to draw accurate flat sketches for garment specification; and applying digital illustration techniques to design a line of apparel for a variety of categories and target markets. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: FSHD 205Essential Methods for Fashion Design.

## FSHD 342 Flat Pattern Design

The study of the theory and application of the flat pattern method used to create patterns for the design of apparel. The drafted master pattern is used to develop a variety of bodices, skirts, sleeves, collars, and shirts. The student applies developed skills in flat patternmaking to create original garments which emphasize design principles, flat sketching, prototype development, fit, and assembly techniques. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: FSHD 230 Advanced Apparel Construction.

## FSHD 352 Draping

A study of the theory and application of principles of apparel design on three-dimensional body forms. Basic silhouettes and garment style features are draped and fitted in muslin. Students use the principles of draping to create original apparel designs in fashion fabric for specified target markets. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: FSHD 230 Advanced Apparel Construction.

## FSHD 355 Fabric Structure and Design

An introduction to basic fabric construction and embellishment techniques. Students study and experiment with weaving, knotting, knitting, embroidery, quilting, piecework, and coloration. The elements and principles of design are incorporated. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisites: FSHD 140 Principles of Apparel Construction and FSHN 120 Consumer Textiles.

## FSHD 357 Fashion Illustration

A study of the illustration methods and design process for the fashion designer. Basic anatomy and analysis of the idealized fashion female and male figures is emphasized through demonstrations and exercises. Students render designs using a variety of mediums while studying the dialog between clothing and the posed figure. Students examine the creative design process for the development of a design collection through analysis of a specific target market and artistic inspiration. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: FSHD 205 Essential Methods for Fashion Design.

## FSHD 372 Computerized Pattern Design: Gerber

A software-specific course in which students learn computer-aided patternmaking using Gerber AccuMark PDS (pattern design software), an industry-standard software for pattern design, grading and marker making. Students are introduced to a comprehensive set of pattern development tools to meet the needs of today's fast-paced apparel manufacturers. Lessons, exercises, and hands-on projects focus on learning the software and preparing students to be successful industry professionals. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction. Note: Students may not receive credit for both this course and FASH 390 Special Topics in Fashion: Computerized Pattern Design: Gerber.
Prerequisite: FSHD 230 Advanced Apparel Construction.

## FSHD 448 Tailoring and Couture Techniques

A laboratory course which emphasizes the comparison of bespoke tailoring and couture techniques to mass production methods focusing on high level workmanship, originality of design, and fit. Processes specific to womenswear and menswear are implemented through fabric selection, proper cutting techniques, inner construction methods, and fine hand finishing skills. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: FSHD 342 Flat Pattern Design or permission of instructor.

## FSHD 449 Specialized Apparel Design

The advanced study and analysis of apparel design with special attention to design lines and materials for specific end use. Students research, design, develop patterns, and construct original garments in categories such as: active sportswear, swimwear, careerwear, protective apparel, childrenswear, special needs, and other user-centered categories. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisite: FSHD 342 Flat Pattern Design.

## FSHD 487 Apparel Design Portfolio

A capstone experience to organize and present design work created in the Apparel Design concentration and to produce a portfolio appropriate for obtaining a professional position in the apparel industry. Students develop a portfolio to demonstrate knowledge and skills in a variety of garment categories; hand and digital illustration; technical sketching techniques; and original fullscale garments. Ideas are assembled in a professional format by integrating the components of design, fabric, and end use. A culminating portfolio presentation is required. Note: Design Studio courses meet for six (6) hours per week and consist of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: Senior standing and FSHD 330 Digital Tools for The Fashion Industry.

## FSHD 490 Independent Study in Fashion Design

An in-depth investigation in a specific topic relating to clothing, textiles, home furnishings, or design. The student must submit a written proposal for the creative or written project to the faculty member who has agreed to be the supervising instructor. Oral presentations and a final report required.
Prerequisite: Junior or senior standing and permission of the instructor.

## FSHD 495 Internship in Fashion Design (1 to 2 course-credits)

A supervised work experience in a professional area of fashion design, product development, or apparel and textile production. Students must work a minimum of 140 hours for each course credit. Online assignments provide guidance for professional development. A faculty supervisor and a representative from the business establishment evaluate student performance.
Prerequisites: Junior Status; FSHD 230 Advanced Apparel Construction. A minimum of a 2.50 GPA in all Fashion Design and Retailing courses. Approval by the Chair of the Fashion Design and Retailing Department must be obtained during the semester before the beginning of the internship.

## FASHION MERCHANDISING

## FSHM 200 Field Study in Merchandising (No course credit)

A non-credit 200-hour field experience for all students preparing for a career in merchandising. The students observe and participate in a wide spectrum of experiences in a fashion retail setting including customer relations, inventory control, sales, and visual merchandising. Must be completed by the beginning of the Junior year and before taking the Fashion Merchandising Internship class.

## FSHM 241 Omni-channel Fashion Retailing

An introduction to a broad range of retailing formats and a study of emerging technology-driven trends in fashion retailing and fashion merchandising. Consumers expect seamless experiences across all touch points and devices whether in-store, at home, at work, or on the road. Emphasis is placed on analysis and application of traditional and digital technologies as they influence sales, management, and communication. Topics such as introduction to retailing formats, distribution channels, social marketing, digital retail technologies, big data, e-commerce, and mobile commerce are discussed.
Prerequisites: FSHM 110 Fashion: Designer to Consumer.

## FSHM 310 Retail Buying and Analysis I

A study of concepts, principles and techniques used by retail buyers to plan and buy merchandise. Topics include pricing, terms of negotiation, mark down/up, average stock, analysis of inventory, stock to sales ratio, and open to buy.
Prerequisites: FSHN 245 Research Methods for the Fashion Industry; and STAT 107 Business Statistics or STAT 117 Introduction to Statistics.

## FSHM 326 Fashion Merchandising: Theory and Industry Application

A study of psychological, sociological, economical, and political influences on fashion diffusion and consumption. Fashion theories are investigated and applied to trend analysis, forecasting, visual merchandising, and technology.
Prerequisite: FSHN 245 Research Methods for the Fashion Industry.

## FSHM 346 Retailing and Consumer Behavior

A study of consumer behavior and the effects on the retail environment. The influence of psychology, sociology, and consumer behavior on individual and group needs related to purchasing behavior is discussed. Topics include clothing and the life cycle, buying behavior, compulsive shopping behavior, collective selection, motives of dress, body image, nonverbal communication and dress, self-concept, and clothing for special needs.
Prerequisites: FSHN 245 Research Methods for the Fashion Industry.

## FSHM 362 World Market: Textiles to Retailing

A study of U.S. and global trade in apparel and home furnishings. Trade principles, history, legislation, and importing/exporting are stressed. Global statistics and trends in relation to the chain of the apparel and home furnishings industries are analyzed. Topics include multinational corporations, mergers, world trade, and market analysis for fashion-related companies including jewelry, cosmetics, footwear, fur, and children's wear.
Prerequisite: FSHN 245 Research Methods for the Fashion Industry.

## FSHM 386 Apparel Product Development

An in-depth study of the steps and the processes involved in apparel product development from style adoption through delivery to the retailer and the product life cycle. Working in cross-functional teams, focus is placed on gaining a comprehensive understanding of the fundamentals of technical design and spec pack development. Emphasis is placed on practical application in the process of size spec development, fitting and communication with vendors, grading of size specifications, costing and cost engineering of garments, construction details, wash care and labeling requirements, textile performance standards of materials and trims, and packing and shipping to customers.
Prerequisites: FSHD 140 Principles of Apparel Construction and FSHN 120 Consumer Textiles.

## FSHM 410 Retail Buying and Analysis II

An in-depth study of the role of retail buyers, buying plan development, and assortment planning and control. Emphasis is placed on buying practices and techniques, inventory allocation and distribution, sales data analysis, and product line development.
Prerequisite: FSHM 310 Retail Buying and Analysis I.

## FSHM 452 Fashion Promotion

A study of promotional activities related to fashion merchandising. Theory and application of visual display, special events, publicity, and advertising are emphasized. Factors such as organizational philosophy, store image, and budgeting are considered.
Prerequisite: FSHM 346 Retailing and Consumer Behavior.

## FSHM 455 Case Studies in Fashion

A case methods course using real situations from existing textile, apparel, home furnishings, and retail companies. Decision making using facts and concepts exhibited in each case is emphasized. Underscored are factors such as executive responsibility, ethics, social responsibility and sustainability, consequences, and pressures in the workplace. Field trips are an integral part of this course.
Prerequisite: FSHN 245 Research Methods for the Fashion Industry.

FSHM 464 Fashion Merchandising: Planning, Policies, and Implementation
A capstone experience focused on analysis of industry standards in a business plan for a fashion business. Concepts include financial planning, store location, organizational structure, merchandise buying and pricing, assortment planning, product sourcing, and financial structure of the apparel and home furnishings industries. The role of the buyers and managers in policy making is analyzed. Procedures and techniques practiced in assortment, movement of goods, customer service, security and store policies are reviewed.
Prerequisites: FSHM 200 Field Study in Merchandising and FSHM 362 World Market: Textiles to Retailing; or permission of instructor.

## FSHM 490 Independent Study in Fashion Merchandising

An in-depth investigation in a specific topic relating to clothing, textiles, home furnishings, or design. The student must submit a written proposal for the creative or written project to the faculty member who has agreed to be the supervising instructor. Oral presentations and a final report required. Prerequisite: Junior or senior standing and permission of the instructor.

## FSHM 495 Internship in Fashion Merchandising

A supervised management level work experience in a professional area of fashion merchandising within a retail-related fashion business. During this experience, students must work a minimum of 280 hours for two (2) course credits. Online assignments provide guidance for professional development. A faculty supervisor and a representative from the business establishment evaluate student performance.
Prerequisites: Senior Status; FSHM 200 Field Study in Merchandising, FSHM 464 Fashion Merchandising: Planning, Policies and Implementation, and STAT 107 Business Statistics or STAT 117 Introduction to Statistics. A minimum of a 2.50 GPA in all Fashion Design and Retailing courses. Approval by the Chair of the Fashion Design and Retailing Department must be obtained during the semester before the beginning of the internship.

## FINANCE COURSES

## FINA 100 Principles of Financial Literacy (Gen. Ed. Domain II-A)

An introduction to the financial literacy tools used in understanding the principles and practices of money management, consumer credit, savings, investments, taxation, and consumer protection. Additional topics include: budgeting, borrowing, consumer loans and debt management, financial solvency, inflation, insurance, housing, fraud and deception, and basic retirement planning. NOTE: Students may not receive credit for both this course and CONS 210 Consumer Economics.
Prerequisite: A satisfactory score on the mathematics placement exam.

## FINA 248 Managerial Finance

The study of the relationship between the investment and financing decisions made by firms. Main topics include working capital and fixed asset management contained within a broad overview of the type of assets a company acquires, the reasons for acquiring them, and the sources and costs of financing the assets. Concepts are discussed primarily in accounting terms, and mathematical relationships are used as a focal point for discussion.
Prerequisite: One (1) of the following courses: ECON 101 Principles of Macroeconomics, ECON 102 Principles of Microeconomics, ACCT 220 Introduction to Financial Accounting, STAT 107 Business Statistics, STAT 117 Introduction to Statistics, or MATH 219 Calculus I; or permission of the instructor.

## FINA 300 Fundamentals of Financial Planning and Insurance

An introduction to the field of personal financial management and planning, focusing on the tools individuals and families employ to manage their financial affairs. Real world topics covered may include income tax planning, cash and asset management, risk management and insurance, employee benefits, retirement planning, and estate planning. The course also covers details of insurance planning including life, health, disability, homeowners, auto and other property and liability insurance.
Prerequisites: ECON 101 Principles of Macroeconomics and ECON 102 Principles of Microeconomics.

## FINA 321 Retirement and Estate Planning

An examination of financial planning for retirement and estate. The main topics of retirement planning covered are setting financial objectives for retirement, planning for adequate retirement income, social security and other governmental benefits, understanding qualified and non- qualified plans, pre- and post-retirement investment planning, planning for long-term care, and planning for incapacity. Additional topics of estate planning include the necessity, objectives and techniques of estate planning, the federal estate, gift, and income tax rules and how to use them to benefit clients, the consequences of intestacy, and the uses of wills.
Prerequisite: FINA 300 Fundamentals of Financial Planning and Insurance.

## FINA 400 Case Studies in Financial Planning

An application of financial planning concepts through case studies, including investment analysis, retirement and employee benefits planning, insurance and income tax planning and estate planning. Students are introduced to the wide range of financial planning tools and techniques available today to the professional financial planner as well as to the individual. Students develop skills necessary to analyze case studies. By the end of the course, the student should be able to construct a sensible and workable financial plan for a client.
Prerequisite: Junior standing and FINA 300 Fundamentals of Financial Planning and Insurance.

## FINA 431 Corporate Finance

The study of the theory and application of the principles underlying the relationships between longrun investments and financing decisions made by the firm. Included are agency theory, long-term planning and forecasting, the seminal theoretical foundations of Modigliani Miller, as well as the use of the CAPM and APT in capital budgeting. Application of the principles is done using the minicase method.
Prerequisite: FINA 248 Managerial Finance.

## FINA 445 Investments

The study of the process whereby investors choose individual securities and combine them into portfolios. The major topics are the fundamentals of security analysis, including the instruments and the markets for securities, and the basics of portfolio analysis from Markowitz to APT. A discussion of derivative securities is also included. Mathematical descriptions of financial instruments and portfolios are widely employed.
Prerequisite: FINA 248 Managerial Finance.

## FINA 474 Topics in Finance

An in-depth evaluation of the current trends and changes that are occurring in finance from the perspective of both the investor and the firm. The study involves student application of techniques derived from the evolutionary changes that are being made in financial management and investment analysis. The focus is on capital planning and asset portfolio formation. Case studies and projects outside the classroom are utilized.
Prerequisite: FINA 431 Corporate Finance.

## FINA 480 Senior Finance Seminar

A seminar designed to afford advanced economics students an opportunity to integrate their studies in an open problem-solving format. The specific topics are developed according to the interests and needs of the participants.
Prerequisite: Permission of the instructor.

## FINA 490 Independent Study in Finance

An opportunity for a student to pursue reading and research on a selected topic in economics under the direction of a faculty member.
Prerequisites: Permission of the instructor and department chair.

## FINA 495 Internship in Finance

A supervised practical experience in a public or private organization appropriate to the student's program of study. Before registering for the internship, the student must submit a proposal outlining the internship and showing how it integrates with the student's academic program. The internship requires written documentation of the student's experiences and a research project or critical evaluation of the experience. Students may earn up to four (4) course credits. The internship is not intended to satisfy or substitute for any of the courses required for the major.
Prerequisite: A minimum of 3.00 quality point average overall and 3.20 in department courses and approval of the internship supervisor. The grade point requirement may be waived at the discretion of the intern's internship supervisor.

## FOOD AND NUTRITION COURSES

## NUTR 002 Orientation to Dietetics (No course credit)

A non-credit 200 hour minimum work experience in dietetics approved by a Food and Nutrition faculty member. A written evaluation of the student's performance is required from the student's employer. This work experience is recommended for all Food and Nutrition majors and is required prior to admission to the Coordinated Program in Dietetics.

## NUTR 110 Fundamentals of Nutrition Science (Gen. Ed. Domain II-B)

An integration of nutrition science with its application to diet and health. Emphasis is placed on nutrient and energy requirements for individuals throughout the life span. Topics include macro- and micronutrients; digestion, absorption, and metabolism; body composition and weight management; vegetarianism; sports nutrition; chronic disease; and environmental issues. Students assess their own diets using nutrient analysis software. Note: Students cannot receive credit for both this course and NUTR 205 Nutrition Science and Applications.

## NUTR 212 Food System Sustainability (Gen. Ed. Domain III-C)

An interdisciplinary exploration of the current food system and the key challenges to feed a growing population. While focusing primarily on United States food system, the course addresses environmental, social, and health impacts across the food supply chain that result from food production, food processing, transportation, retail, consumption choices, and food waste. Students explore individual-, community-, and policy-level solutions for a more sustainable food system. This course includes field trips. Note: Students cannot receive credit for both this course and NUTR 208 Food System Sustainability.

## NUTR 262/262L Food, Culture, and Society with Lab

(1.25 Course-credits) A study of the sociocultural and economic factors that affect the ways individuals and groups manage food. The impacts of culture, income, gender, age, health concerns, and time management are examined. The food system is studied as it relates to consumers' needs. Food management skills are emphasized in laboratory experiences. Nutritional analyses are performed on the computer. Laboratory (3 hours). Note: This course is only open to majors in Food \& Nutrition and Health \& Wellness or related minors.
Corequisite: NUTR 262L Food, Culture, and Society Lab.
Prerequisite: NUTR 110 Fundamentals of Nutrition Science.

## NUTR 271 Nutrition for Sports and Exercise

The study of the association between nutrition and exercise performance. Metabolism of carbohydrates, fats, proteins, vitamins, minerals and water and its effect on athletic training is stressed. Nutrition assessment of athletes, how to measure body composition, and the use of and controversy over ergogenic aids are explored in depth.
Prerequisites: NUTR 110 Fundamentals of Nutrition Science, CHEM 103 Introductory Chemistry or CHEM 107 Principles of Chemistry, BIOL 142 Introduction to Human Biology or BIOL 235 Principles of Human Physiology, or BIOL 242 Human Anatomy and Physiology II.

## NUTR 290 Study Tour: Food and Nutrition

A food and nutrition course taught through on-site exposure to food systems and/or culinary practices. Traditional methods of teaching are also employed. Students gain direct experience of food and nutrition in geographic, cultural, political, educational, culinary and historical contexts. Students meet and prepare course materials prior to the tour. The topics and locations may vary from year to year and are announced in the course schedule. Note: This course, in a different topic/location, may be repeated for credit. Additional course fees may apply.

## NUTR 333 Nutrition and Chronic Disease

An exploration of the nutritional and physiological aspects of the major chronic diseases and conditions affecting individuals in the United States. Topics include obesity, heart disease, cancer, diabetes, and osteoporosis. Emphasis is placed on chronic disease in the aging population.
Prerequisites: Junior Status; NUTR 262 Food, Culture, and Society with Lab (may be taken concurrently).
NUTR 364/364L Experimental Study of Food with Lab
(1.25 Course-credits)

A study of the scientific basis for the selection, preparation and handling of food. Laboratory (3 hours) application includes principles underlying food preparation, experimentation in comparative food preparation, and an independent student laboratory research project.
Corequisite: NUTR 364L Experimental Study of Food Lab.
Prerequisite: NUTR 262 Food, Culture, and Society with Lab and an organic chemistry course.

## NUTR 374 Human Nutrition Science

A study of the interrelationships and respective functions of nutrients, and the integration of nutrition, biochemistry, and human physiology. Emphasis is placed on research design in classic and current nutrition studies with respect to nutrition and health.
Prerequisites: BIOL 235 Principles of Human Physiology with Lab and either CHEM 300 Principles of Biochemistry with Lab or CHEM 301 Biochemistry I with Lab; Food and Nutrition major with a Coordinated Program in Dietetics or Nutrition and Dietetics concentration only; Food Science major with a Food Science and Technology concentration only.

## NUTR 381 Medical Nutrition Therapy I

An introduction to the application of nutrition care of individuals and groups in a variety of health care settings. Topics include nutrition assessment and care plans, medical terminology and documentation, interviewing and counseling skills, and educational theory and material development. Note: The Coordinated Program in Dietetics requires students to complete a concurrent clinical experience in cooperating health care facilities. A physical exam, a Criminal Offender Record Information (CORI) check, and liability insurance are required for the clinical experience.
Prerequisites: BIOL 142 Introduction to Human Biology with Lab or BIOL 235 Principles of Human Physiology with Lab or BIOL 242 Human Anatomy \& Physiology II with Lab; NUTR 262 Food, Culture, and Society with Lab.

## NUTR 384 Foodservice Systems

A study of current trends and practices in the management of foodservice systems. Course topics include food safety, menu planning, procurement, quantity food production, delivery systems, and financial management. Students satisfy the requirements for the National Restaurant Association's nationally accredited food safety training program and take the ServSafe© Food Protection Manager Certification Examination.
Prerequisite: NUTR 364 Experimental Study of Food with Lab or permission of instructor.

## NUTR 390 Special Topics in Nutrition

An exploration into an identified topic in the nutrition field. Topics vary with instructor and reflect current trends or major themes in food and nutrition. Students write and present a major paper on the topic.
Prerequisites: NUTR 262 Food, Culture, and Society with Lab (may be taken concurrently) and junior standing. Additional prerequisites may be required dependent upon topic.

NUTR 400 Preparation for Dietetic Internship (No course credit)
A preparation for applying to a 1000-hour post-baccalaureate Dietetic Internship (DI) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Students meet with the Director of the Didactic Program in Dietetics (DPD), get information on DI Open Houses, research available internships, participate in a resume-writing workshop, develop interviewing skills, write a professional personal statement, obtain letters of reference, and gain all information needed for their DI application. Note: This course is open only to students in the Nutrition and Dietetics Concentration of the Food and Nutrition major. Offered Fall semester only. Note: A completed accredited ACEND dietetic internship is required for eligibility to take the national Registration Examination for Dietitians, which earns candidates the RD/RDN credential. Prerequisite: Senior status.

## NUTR 478 Community Nutrition

An introduction to the program, policies, and institutions that influence nutrition services at the local, state, and national levels. Special attention is given to the assessment, planning, intervention, and evaluation of programs targeted to populations with high nutritional risk. The role of the political process in the promotion of food and nutrition programs is examined.
Prerequisite: HLTH 206 Wellness Behavior or NUTR 381 Medical Nutrition Therapy I.

## NUTR 479 Technology Applications in Nutrition

A study of technology designed to enhance the efficiency and accuracy of practice in nutrition professions. Investigations include development, application and evaluation of emerging technologies used in nutrition practice.
Prerequisite: NUTR 381 Medical Nutrition Therapy I.

## NUTR 481 Medical Nutrition Therapy II

An integration of pathophysiology, biochemistry, and nutrition concepts that form the basis for medical nutrition therapy in health care. The nutrition care process and standardized language is applied to the development of nutrition care plans for case studies representing a variety of diseases and medical conditions. Note: Students cannot receive credit for both NUTR 483 Medical Nutrition Therapy II and NUTR 481 Medical Nutrition Therapy II.
Prerequisites: NUTR 374 Human Nutrition Science and NUTR 381 Medical Nutrition Therapy I; Open to students in the Coordinated Program in Dietetics or Nutrition and Dietetics concentrations only.

## NUTR 481L Medical Nutrition Therapy II Clinical Practice (non-credit)

A laboratory (3 hours) experience to integrate nutrition and medical nutrition therapy principles along with developing interviewing skills. Students identify goals and objectives of nutrition care and counsel clients in selected modified diets in role-played situations. Students also complete a minimum of 20 hours under the supervision of a registered dietitian in a clinical facility where they apply the facility's dietary policies to create nutrition care plans for selected disease states corresponding to topics presented in NUTR 481 Medical Nutrition Therapy II. NOTE: This course is required for those students in the Coordinated Program in Dietetics concentration.
Corequisite: Concurrent enrollment with NUTR 481 Medical Nutrition Therapy II. Open to Coordinated Program in Dietetics concentration students only.

## NUTR 482 Management of Food and Nutrition Services

The application of principles of management as they relate to the administration of human, physical, and financial resources of food and nutrition services. Topics include management theory, personnel selection, training, evaluation, organizational behavior, communication, governmental influences, labor management relations, marketing, and budgeting. This course, designed for Food and Nutrition majors, utilizes the case study approach, and requires the development of a business plan.
Prerequisites: NUTR 262 Food, Culture, and Society with Lab; junior status.

## NUTR 490 Independent Study in Food and Nutrition

An in-depth investigation of a specific topic relating to the student's area of interest in food and nutrition. The student submits a written proposal on the topic to the supervising faculty. An oral presentation and final written report of the student's topic is required. Note: This course is only available to students majoring in Food and Nutrition or minoring in Nutrition.
Prerequisites: Permission of the supervising instructor and the department chair.

## NUTR 495 Internship in Food and Nutrition

A supervised work experience in the field of food and nutrition that complements the student's program of study. An ability to work independently is expected. A major project and additional coursework are required. A minimum of 120 hours must be completed in the placement setting within one (1) semester, which equates to at least eight (8) hours per week during fall and spring semesters and at least ten (10) hours per week during summer term. Students must submit an application to the department chair prior to approval in the semester preceding.
Prerequisites: Senior standing and a minimum GPA of 2.50 in all courses for the major. Department permission required.

## NUTR 499 Food and Nutrition Internship: U.S. Army Natick Soldier Systems Center

A supervised work experience in food or nutrition as it pertains to the military. An ability to work independently is expected. A major project and additional coursework are required. A minimum of 120 hours must be completed in the placement setting within one (1) semester, which equates to at least eight (8) hours per week during fall and spring semesters and at least ten (10) hours per week during summer term. Students must submit an application to the department chair prior to approval in the semester preceding.
Prerequisites: NUTR 364/364L Experimental Study of Food, NUTR 381 Medical Nutrition Therapy I, and a minimum GPA of 2.50 in all courses for the major. Department permission required.

## FOOD SCIENCE COURSES

## FDSC 100 Orientation to Food Science and Food Industry (. 25 Course-credits)

An introductory immersion into the field of food science and the food industry. Students engage in presentations by various food companies, gaining insight into the industry's products, services, and technologies. The course aims to spark interest in the discipline and lay the foundation for future exploration in food science for majors in their first semester in the food science program.

FDSC 151 Principles of Food Science (Gen. Ed. Domain II-B)
A study of food systems as chemical entities. This course employs biological sciences, physical sciences, and engineering in the study of the nature of foods, causes of deterioration, and the principles underlying food processing. Emphasis is placed on food research in the twenty-first century. Note: Students cannot receive credit for both FDSC 151 Principles of Food Science and FDSC 161 Introduction to Food Science and Technology.

## FDSC 161/161L Introduction to Food Science and Technology with Lab

(Gen. Ed. Domain II-B)
(1.25 Course-credits)

An introduction to food science and technology based on an understanding of the chemical principles regulating the properties of food. This course employs physical sciences, biological sciences, and engineering in the study of the nature of food, food safety, and the technology underlying the processing and preservation of food. Laboratory ( $\mathbf{3}$ hours) sessions coordinated with the lectures illustrate and reinforce the important relationships between chemical principles and food. Note: Students cannot receive credit for both FDSC 161 Introduction to Food Science and Technology and FDSC 151 Principles of Food Science.
Corequisite: FDSC 161L Introduction to Food Science and Technology Lab.

## FDSC 200 Seminars in Food Science (. 25 Course-credits)

A comprehensive exploration of the field of food science through seminars, delving into the intricacies of creating various food products. Students gain insight into the complexity of foods through discussions of fundamental procedures used in food product development. The seminars, delivered by industry experts, showcase real-world examples of food production and this multifaceted approach encourages a well-rounded understanding of the field of food science. Prerequisite: Sophomore status, Food Science Major, or permission of instructor.

## FDSC 300 Professional Development in Food Science (. 25 Course-credits)

An exploration of the professional food science environment that includes pairing students with industry experts. These volunteers engage with food science students, offering invaluable career guidance and insights. By connecting with an industry mentor, students may seek advice, ask questions, and learn from the real-world experiences of professionals in their field.
Prerequisites: Junior Standing, Food Science Major, or permission of instructor.
FDSC 351/351L Food Engineering and Processing with Lab
(1.25 Course-credits)

An integrated approach of food engineering principles and food processing techniques. Topics include thermodynamics, fluid flow and heat transfer, evaporation, refrigeration, psychrometry, drying, distillation and the essential food processing methods that ensure attainment of food product wholesomeness. Students are required to enroll in the corresponding laboratory (4 hours). Laboratory (4 hours).
Corequisite: FDSC 351L Food Engineering and Processing Lab.
Prerequisites: MATH 180 Precalculus or MATH 219 Calculus I; PHYS 201/201L Introductory Physics with Lab or PHYS 211/211L Principles of Physics I with Lab.

FDSC 400 Transition to Food Science Career (. 25 Course-credits)
Designed to prepare students to transition into a career in food science. Students attend professional presentations and discussions during which companies share their best practices and technologies. Students meet one-on-one with visiting experts to receive feedback about career preparation. Prerequisites: Junior Standing, Food Science Major, or permission of instructor.

## FDSC 405/405L Food Analysis with Lab

(1.25 Course-credits)

A study of the fundamental principles of food analysis with the laboratory work including both the classical and the more recent sophisticated methods of analysis. Laboratory ( $\mathbf{4}$ hours).
Corequisite: FDSC 405L Food Analysis Lab.
Prerequisite: CHEM 300/300L Principles of Biochemistry with Lab or CHEM 301/301L Biochemistry I with Lab or permission of the instructor.

FDSC 408/408L Food Chemistry with Lab
(1.25 Course-credits)

An introduction to chemical phenomena that dictate food quality, safety, and nutrition. Reactions and molecular behavior of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods are studied in the context of processing, storage, and safety. The laboratory provides opportunities for students to observe, explore, and manipulate model food systems. Laboratory (4 hours).
Corequisite: FDSC 408L Food Chemistry Lab.
Prerequisite: CHEM 300/300L Principles of Biochemistry with Lab or CHEM 301/301L Biochemistry I with Lab or permission of the instructor.
FDSC 413/413L Food Safety and Microbiology with Lab (1.25 Course-credits)
A focus on the microorganisms involved in food production, food spoilage, and the transmission of diseases through foods. The effect of various methods of food preservation is evaluated in terms of public health, food spoilage, food quality and nutritional value of foods. Laboratory ( 4 hours).
Open to Food Science Majors or Minors only or permission of instructor.
Corequisite: FDSC 413L Food Safety and Microbiology Lab.
Prerequisite: BIOL 228/228L Microbiology with Lab.

## FDSC 490 Independent Study in Food Science

An original problem to be selected and researched under the direction of a faculty member. A written presentation of the research findings is required.
Prerequisite: Permission of the instructor.

## FDSC 495 Food Industrial Practicum

Enhancement of student's practical knowledge of food science by participating in projects sponsored by industrial and/or governmental agencies.
Prerequisite: Permission of instructor.

## FRENCH COURSES

## FREN 101 Elementary French I (Gen. Ed. Domain I-C)

An integration of language and culture designed to provide beginners with basic functional language skills and an appreciation of Francophone culture. Note: Heritage speakers and students with previous experience in this language must take a placement test.

## FREN 102 Elementary French II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills and an appreciation of Francophone culture.
Prerequisite: Students must complete FREN 101 or have the corresponding placement test score or prior approval of instructor in order to enroll in FREN 102.

FREN 201 Intermediate French I (Gen. Ed. Domain I-C)
An intermediate French course in which students are trained to become independently functional in the French language and knowledgeable about Francophone culture and thought. Discussions, in French, are based on cultural readings, tapes, and films. The course also includes a comprehensive grammar review.
Prerequisite: FREN 102 Elementary French II or the equivalent placement test score or prior approval of instructor.

## FREN 202 Intermediate French II (Gen. Ed. Domain I-C)

A continuation of intermediate French I. Students gain further training in order to become independently functional in the French language and knowledgeable about Francophone culture and thought. Discussions, in French, are based on cultural readings, tapes, and films. The course also includes a comprehensive grammar review.
Prerequisite: FREN 201 Intermediate French I or the equivalent placement test score or prior approval of instructor.

## FREN 490 Independent Study in French

An in-depth investigation into a topic in the areas of literature, culture, linguistics or pedagogy, selected by the student under the guidance of a member of the World Languages Department. Regular meetings with the faculty advisor are arranged. A written report is required. Limited to juniors and seniors.
Prerequisite: Advanced knowledge of French literature and culture. This course is not meant to be a replacement for major required courses.

## GEOGRAPHY COURSES

## GEOG 101 Introduction to Human Geography (Gen. Ed. Domain III-B)

An introduction to geography, focusing on its relevance to contemporary man. Emphasis is placed on basic concepts and the geographic point of view.

## GEOG 110 World Regional Geography (Gen. Ed. Domain III-C)

An introduction to the nature and scope of geography, the techniques and applications of geography, and the geographical context of current social, economic, political, and environmental problems in the major regions of the world. Course focuses mainly on non-Western regions.

GEOG 111 Visualizing Social and Environmental Justice (Gen. Ed. Domain II-A)
An introduction to the use of computers, drones, satellites, and other technologies to investigate, analyze, and visualize changing global environments and social and environmental justice issues. Injustice thrives when hidden, but the suite of new technologies now available, about which students learn in this class, is used to address data privacy concerns, humanitarian needs, human rights abuses, disease clusters, and inequitable access to food and water. The tools in this course are utilized by those in the humanities, business, social and behavioral sciences, and STEM to solve complex problems across the globe.

## GEOG 180 Native Americans: The Original Injustice on American Soil (Gen. Ed. Domain III-B)

An introduction to Indian Law and the unique relationships between the tribes and the federal and state governments. This body of law can have radically different effects on tribes depending in part on their geographical contexts. The course then examines certain tribal issues in depth, and explores how the geographical location of the tribe and the corresponding climate and terrain make these issues unique to the tribe.

## GEOG 201 Money, Power, \& Space: Introduction to Economic Geography

The study of the organization and interrelationships of and between economic and non-economic actors and institutions, and their activities in and across geographical space. Emphasis is on factors influencing the spatial distribution of economic activities such as agriculture, manufacturing, services, and technology, as well as the impact of globalization on the aforementioned activities. The course also considers economically sustainable theories and the relevance of the Green Economy in transforming conventional production, consumption, and disposal cycles. Furthermore, the course utilizes geospatial technology to critically analyze current issues in economic geography and environmental economic geography.
Prerequisite: Sophomore standing.

## GEOG 206 Political Geography (Gen. Ed. Domain III-C)

A spatial analysis of the rise of the nation state and a comparative examination of political structures and processes within states. Geopolitical processes, such as imperialism, are studied through time and space. The formation of new types of political and social movements at a number of global and local levels is discussed. In addition, the role of class, race, and gender is explored as it relates to issues of power and uneven access to power over space.

## GEOG 208 The Environment, Health, and Disease

An examination and analysis of the spatial aspects of health and disease ecology resulting from environmental change. The course applies geographical information systems (GIS) methods to analyze the interrelationship between environmental modification and the prevalence of diseases throughout the world. The course begins with a discussion of disease ecology, or how human behavior, in its cultural and socioeconomic context, interacts with environmental conditions to cause morbidity and mortality. Students use geographic information systems (GIS) to trace the linkages between disease agents, disease vectors and their hosts, and the diffusion of disease.

## GEOG 211 Cultural Geography (Gen. Ed. Domain III-B)

A study of cultural practices across geographically distinct human societies. Topics include identity politics, commodification, and contestations about the preservation and meaning of heritage, as well as more traditional phenomena such as language, religion, material culture, and economic practices. The course addresses the role of political and economic contexts not only in maintaining, but also challenging, the processes of identity formation and transmission.

## GEOG 212 Geographic Perspectives on the Global Environment

An introductory survey stressing the geographic approach to the study of man/land relationships. Emphasis is placed on the impact of human activities on the environment and on conflicts between resource exploitation and environmental quality. Contemporary geographic themes concerning the environment: perception, natural resource utilization, modification by urbanization, and environmental regions are studied. Particular focus is on New England and the United States.
Prerequisite: Sophomore standing or permission of instructor.

## GEOG 214 Spatial Analysis Using Geographic Information Systems

A basic introduction to the skills and techniques needed by geographers. The course focuses on geographic applications of quantitative methods and uses the Statistical Package for the Social Sciences (SPSS) and Geographic Information Systems (GIS) software for analysis and presentation of data.

## GEOG 216 Introduction to Geographical Information Systems

An introduction to the use of Geographical Information Systems (G.I.S.) in analyzing spatial data, including methods of data acquisition, and the theory and design of G.I.S. storage and to various aspects of retail location, urban planning, and environmental concerns.
Prerequisite: Prior knowledge of computers, with permission of instructor, or CSCI 120 Introduction to Information Technology.

## GEOG 222 Geographic Perspectives on Globalization (Gen. Ed. Domain III-C)

An examination of globalization as a spatial process. Economic, social, political, and cultural analyses are integrated to look at geographically uneven development, the spatial expansion of power systems, which take many forms, and economic and environmental issues between nation states and global governance institutions.

## GEOG 235 Environmental Law and Policy

Designed for students whose interest in the environment or whose field of present or future employment would be enhanced by a basic understanding of legal and policy matters as they apply to the environment. The course begins with a discussion of the structure and function of the American judicial system, followed by an introduction to the concepts of administrative and common law. The course addresses important environmental laws, such as the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, and the various hazardous waste statutes, and examines the unequal impacts of these laws on underrepresented populations. The body of environmental law is applied to current environmental issues, addressing the political, economic, cultural, and ethical variables that influence environmental policy in the United States.

## GEOG 237 Geographies of Global Climate Change (Gen. Ed. Domain III-B)

A critical exploration of the actors, institutions, events, issues and debates surrounding global climate change. Through the geographic lens of international political economy, the course examines human energy systems and technical transitions, geopolitics and international relations, international organizations and global governance and the economics of climate change in the context of neoliberal globalization. The objective of this course is to focus student attention on power in political processes and policy-relevant issues and debates related to addressing global climate change.

## GEOG 238 Environmental Geography

An examination of the Earth's physical systems and human interactions with the environment. Students analyze geographically how the environment impacts and is impacted by economic conditions, political decisions, and cultural traditions. Climate change impacts on weather patterns, sea levels, forests, and other wildlife habitats are discussed alongside current adaptation plans.

## GEOG 240 Land Use Law and Policy

An overview of legal and policy matters as applicable to land use in local municipalities. Topics include zoning and subdivision regulations, wetland protection, comprehensive planning, affordable housing, smart growth, and protection of open space. This course is designed for students whose interest in land use policies or whose field of present or future employment would be enhanced by a basic understanding of legal and policy matters as they apply to cities and towns.

## GEOG 250 Geography of the United States and Canada (Gen. Ed. Domain III-C)

A broad regional survey of the natural and cultural landscape features of the United States and Canada, with emphasis on processes of urban-economic development and changing patterns of population, settlement, and land use.

## GEOG 251 Geography of New England

A survey of the natural landscape features and the present geographical development of New England as a representative region of the United States. Emphasis is on the emerging patterns and issues of the region's economic and urban development and how it interacts with North America and the world. Field trips.

## GEOG 252 Geography of Europe (Gen. Ed. Domain III-C)

An examination of the geographical factors that have contributed to the natural and cultural landscape of modern Europe, excluding the former U.S.S.R. The course extensively addresses issues of gender, race, and social class as they relate to demographic and economic changes in Europe.

## GEOG 254 Geography of Monsoon Asia (Gen. Ed. Domain III-C)

An analysis of Southern, Southeastern and Eastern Asia in terms of their natural environment, population distribution and problems, regional divisions, and current problems of economic development.

GEOG 255 Geography of Sub-Saharan Africa (Gen. Ed. Domain III-C)
An examination of the physical and cultural landscape of Africa south of the Sahara, with special emphasis on the native cultures of the area and their influence on the landscape; the revolutionary effects of European interventions and conquests; and the modern political, cultural, and economic climates.

## GEOG 256 Geography of the Middle East (Gen. Ed. Domain III-C)

Physical, cultural and political environments which contribute to the instability that exists in Southwest Asia and North Africa.

## GEOG 258 Geography of the British Isles (Gen. Ed. Domain III-C)

An analysis of the environmental, political, and cultural features of the United Kingdom and Republic of Ireland, framed in regional and global contexts. The course focuses on challenges in economic development, historic and current patterns of migration, avenues toward conflict resolution, and the region's role in globalization.

## GEOG 260 Introduction to Urban Studies and Planning in the United States

An analysis of the development of American metropolitan areas. Topics include the history of urbanization and planning in the United States, urban finance, suburban sprawl, racial inequalities and gentrification, environmental degradation, vulnerability to global climate change, and other urban problems of American cities and towns. Local field trips may be included.

GEOG 291 Western Regional Geography: Field Study (Gen. Ed. Domain III-C)
An exploration of a western geographical region through an actual field study. The focus is on the physical, cultural, and historical geography of the visited area, with specific emphasis on the significance of historical, cultural, and recreational sites on the changing patterns of economic, social, and cultural geography. Emphasis is placed on an understanding of differing experiences and perspectives relating to issues of gender, race, and class in the region. Location of region is announced when offered. NOTE: Students may take the course twice for credit; however, in no case may the student take two field study courses in the same Western region.

## GEOG 300 Geospatial Applications Using Python

An introduction to applied geospatial analysis using Python programming. The objective of this course is to demonstrate the utility of using Python and open source database systems in all phases of GIS analysis, including spatial data input, database management, geo-visualization, and spatial analysis. The course focuses on using open-source Python libraries suited for analyzing GIS data.
Prerequisite: GEOG 111 Visualizing Social and Environmental Justice, GEOG 216 Introduction to Geographical Information Systems, or permission of instructor.

## GEOG 316 Advanced Geographic Information Systems

An advanced course in geographic information systems (GIS). The purpose of this course is to examine how GIS can be used for spatial analysis and modeling applications. Topics include a number of advanced analytical techniques using GIS, including hydrologic modeling, location analysis, spatial interpolation, nearest neighbor estimation, map algebra and urban growth simulation. Prerequisite: GEOG 216 Introduction to Geographical Information Systems.

## GEOG 328 Introduction to Remote Sensing

An introductory course in digital remote sensing and satellite imagery analysis. The goal of this course is to introduce the fundamental principles of remote sensing with an emphasis on the theoretical and applied realms of the discipline. Topics include physics of electromagnetic radiation, digital photogrammetry, image interpretation, spatial resolution, airborne and space-borne sensors and image classification. All topics discussed in lecture are reinforced through laboratory exercises and field work.
Prerequisite: GEOG 216 Introduction to Geographical Information Systems.

## GEOG 370 Location Theory

A survey of the classical and current location theories, which are used by geographers, planners, and site analysts. Location theories include agricultural, industrial, retail, and service locations. Concepts, methods, and techniques of spatial distribution, spatial function, and spatial relationships are emphasized. Cartographic analysis and GIS applications are major parts of the course.
Prerequisite: GEOG 201 Economic Geography or permission of instructor.

## GEOG 375 Sustainable Management of Natural Resources

An analysis of traditional and emerging resource management philosophies, ecosystem preservation practices, and sustainable methods of management. Through discussions, oral presentations, and writing projects, students learn how effective policy can turn societal objectives into focused actions. The course focuses on legal mandates for creating sustainable policies with regard to energy, water, air, forestry, minerals, wildlife, and other natural resources, at local, state, and federal scales. Students create comprehensive management plans using current and emerging strategies to provide for efficient and effective ways to promote sustainable natural resource use, particularly in light of the rapid movement of the energy sector away from fossil fuels, and the rapid, global, and disruptive effects of climate change.
Prerequisite: ENWR 110 Composition II or permission of instructor.

## GEOG 380 Making Places Sustainable

An examination of the concepts, tools, and techniques employed by various stakeholders to make neighborhoods and communities more inclusive, equitable, economically viable, environmentally responsible, and healthy. Topics include green design, community involvement, development planning and financing, and long-range strategic planning.
Prerequisite: GEOG 260 Introduction to Urban Studies and Planning in the United States or permission of instructor.

## GEOG 390 Special Topics in Regional Geography

An in-depth examination of environmental concerns and other themes, for a specified geographical region. Note: This course may be taken more than once, provided that a different region is the subject. Prerequisite: GEOG 110 World Regional Geography or permission of the instructor.

## GEOG 486 Senior Geographic Information Systems Project

A supervised study using Geographic Information Systems (GIS) methods in the area of the student's interest. Any student wishing to enroll in this course must submit a written proposal for the study topic to the course supervisor and the topic must be approved by the supervisor prior to enrollment into the course. The student must meet with the course supervisor at least six times during the semester. At the end of the semester, the student must present the results of the study in a research paper or poster as well as make an oral presentation to the department faculty.
Prerequisites: Senior standing and permission of instructor.

## GEOG 490 Independent Study in Geography

A Geography major (or minor) with demonstrated ability to use geographical tools and research methods may independently pursue an in-depth investigation of a geographic topic under the guidance of a faculty advisor. The student must present a written request on the approved form. Admission to this course must be approved by the Geography Department at least three weeks prior to registration.

## GEOG 495 Internship in Geography

A supervised practical experience in a public or private agency, appropriate to the student's training and interests. Admission to this course must be approved by the Geography Department Chair according to published departmental guidelines.
Prerequisites: Senior standing and permission of instructor; 3.00 GPA in Geography major, 2.75 overall GPA; completion of the major core courses.

## GEOLOGY COURSES

## GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab (Gen. Ed. Domain II-B, Lab) <br> (1.25 Course-credits)

An examination of the formation, composition, structure and workings of Earth. Topics include the formation of the solar system in general and accretion of Earth in particular; the processes and driving forces of plate tectonics, including circulation of the deep mantle; the nature and origin of minerals and rocks; the use of minerals and rocks as indicators of geologic history; earthquakes, rock deformation, and the formation of mountain belts; and the effects of water, ice, and wind on weathering and shaping Earth's surface. Students are required to enroll in the corresponding laboratory ( 3 hours) which includes field trips providing an authentic geological experience to all students. Note: Credit is given for this course only if taken before GEOL 208 Principles of Physical Geology. Students intending to major or minor in Earth System Science should take GEOL 208 Principles of Physical Geology instead of this course.
Corequisite: GEOL 108L Our Dynamic Planet: Introduction to Physical Geology Lab.
Prerequisite: Eligibility to enroll in college level math without corequisite remediation, or permission of the instructor.

GEOL 208/208L Principles of Physical Geology with Lab
(1.25 Course-credits)

An expansive and quantitative examination of the formation, composition, structure and physics of Earth. Topics include the formation of the solar system in general and accretion of Earth in particular, with an emphasis on meteoritic constraints on Earth's composition; the processes and driving forces of plate tectonics, including circulation and structure of the deep mantle; the nature and origin of minerals and rocks, with an emphasis on the structure of the principle mineral groups; the use of minerals and rocks as indicators of geologic history; earthquakes, rock deformation, and the formation of mountain belts; and the effects of water, ice, and wind on weathering and shaping Earth's surface. Extensive quantitative analysis, laboratory ( 3 hours) work, and field trips provide an authentic geological experience to all students. This is an advanced introductory course designed for students majoring or minoring in Earth System Science. Note: Students may not receive credit for GEOL 108 Our Dynamic Planet: Introduction to Physical Geology after receiving credit for GEOL 208 Principles of Physical Geology.
Corequisite: GEOL 208L Principles of Physical Geology Lab.
Prerequisite: MATH 123 Introduction to Functions or a satisfactory score on the mathematics placement examination.

## GEOL 233 Environmental Geology

An examination of the dynamic relationships among geologic processes, population, and society. Topics include natural disasters (earthquakes, volcanic eruptions, and landslides), geologic resources (water, soil, minerals, and energy) and the local and global impact of human interaction with Earth (air, soil, and water pollution; resource extraction and consumption; coastal erosion; and climate change). Students are introduced to best-practice policies for adapting to geologic impacts on the environment and explore case studies to supplement the lectures.
Prerequisite: MATH 123 Introduction to Functions (may be taken concurrently) or a satisfactory score on the mathematics placement examination AND one of the following: CHEM 107 Principles of Chemistry with Lab, EASC 101 Climate Change is Now: An Introduction to Earth Systems, GEOG 203 Introduction to Physical Geography, GEOL 108 Our Dynamic Planet: Introduction to Physical Geology with Lab, or GEOL 208 Principles of Physical Geology with Lab.

## GLOBAL STUDIES COURSES

## GLST 101 Introduction to Global Studies (Gen. Ed. Domain III-C)

An introduction to the basic concepts and general inquiry about issues of globalization. The course serves as an interdisciplinary gateway to key debates on the social, political, economic and cultural connections of the world. Topics may include global inequalities, global warming, immigration, global health, globalization and crime, and global social movements.

## GLST 201 Research Methods: Case Studies in Globalization

An introduction to qualitative research skills that students need in the global studies major. The course examines specific issues related to globalization. Students learn through case study analyses which provide the focusing tool for the study of a specific area concerning globalization. Prerequisite: GLST 101 Introduction to Global Studies or permission of the instructor.

## GLST 401 Global Studies Seminar

A seminar designed to provide students with the tools for critically analyzing the interconnectedness of global and local issues. Students explore a specific topic along the lines of their concentration area of globalization and engage in a research project to synthesize their hands-on research experience at the local level with knowledge they gathered from the work of earlier courses. Students develop a research proposal and conduct a literature review. Open to Global Studies majors only. Prerequisite: Junior standing and GLST 201 Research Methods: Case Studies in Globalization.

## GLST 490 Independent Study in Global Studies

An in-depth and self-directed study which provides the student with an opportunity to explore an area of interest and enhance knowledge in a specific topic related to Global Studies. With the approval of the program coordinator, the student works under the supervision of a faculty member from an affiliated department, and conducts research and completes reports, research papers, or any type of assignments deemed suitable by the faculty supervisor. Prerequisite: Global Studies majors only.

## GLST 495 Internship in Global Studies

A supervised field study or professional experience in the area of the student's interest that complements formal course work. The internship program is offered through cooperation of participating institutions that provide guidance for the interns. The field work involves a minimum of 8 hours per week ( 120 hours total) in an applied setting. The internship in Global Studies may be taken for one (1) course credit in the major as a free elective. A student may not enroll in an internship more than twice (two course credits). Any student interested in participating in an internship must consult with the Global Studies program coordinator prior to the middle of the semester preceding the semester of the desired internship. Students are responsible for securing a placement. A written plan for the internship must be submitted by the student to the program coordinator. The plan must be approved by the program coordinator as well as the faculty member who serves as internship coordinator. The student must meet with the faculty internship coordinator at least four (4) times during the semester.
Prerequisites: Global Studies majors of senior standing; two (2) semesters completed at Framingham State University; and approval of the Global Studies Program Coordinator.

## HEALTH AND WELLNESS COURSES

## HLTH 110 Wellness for Life (Gen. Ed. Domain III-B)

An introduction to complex health issues affecting the wellness of individuals and communities in contemporary society. Students explore the roles of individual health behaviors on the dimensions of wellness throughout the lifespan. The course includes community strategies for health promotion and disease prevention.

## HLTH 140 Introduction to Exercise Science (Gen. Ed. Domain II-B)

An introduction to the interdisciplinary science of human movement. Topics include motor control, exercise physiology, biomechanics, sports medicine, and exercise psychology as they relate to health and wellness, physical activity, and athletic performance.

## HLTH 206 Wellness Behavior

An introduction to health and wellness behavior from a public health perspective. The course covers determinants of health and wellness behaviors at the individual, group, institutional, community, and policy levels. Students explore the use of research and theory in promoting health and wellness behaviors.
Prerequisite: HLTH 110 Wellness for Life.

## HLTH 222 Public Health and Epidemiology

An overview of the field of public health, including social, behavioral, biological, and environmental determinants of population health. Topics include health disparities; principles of epidemiology and research methods; disease prevention and health promotion efforts at a population level in both national and global settings; study of vulnerable populations; and emerging challenges for the field of public health.
Prerequisite: Any 100-level mathematics course.

## HLTH 302 Exercise Physiology

An examination of the acute responses and chronic adaptations to exercise on the human body. Major topics include the functions of the muscular, cardiovascular, respiratory, nervous, and hormonal systems during exercise; energy metabolism; and temperature regulation. Practical application of these topics is emphasized.
Prerequisite: A grade of C- (1.70) or higher in either BIOL 235 Principles of Human Physiology or BIOL 242 Human Anatomy and Physiology II or permission of instructor.

## HLTH 310 Exercise Testing and Prescription

Designed to develop the knowledge and skills necessary to conduct the field and laboratory procedures used to assess the health-related components of physical fitness in both apparently healthy and special populations. Emphasis is placed on conducting various health-related fitness assessments and using results to develop appropriate and individually tailored physical activity prescriptions.
Prerequisites: HLTH 302 Exercise Physiology; can be taken concurrently.

## HLTH 321 Mental Dynamics in Sport and Physical Activity

A study of how mental factors affect participation in sport and physical activity and how participation in sport and physical activity affect mental factors. Topics include factors such as motivation, stress and arousal, confidence, imagery, goal setting, and burnout. Emphasis is placed on the practical application of conceptual knowledge through experiential activities.
Prerequisites: Junior Status and Completion of Gen. Ed. Domain III-B.

## HLTH 326 Drugs, Alcohol, and Addictive Behavior

A multidisciplinary study of the relationships of drug use, misuse, and abuse to biological and psychological health. Students explore the types of compounds that can influence brain activity, behavior, and physiology. Topics include the history of drug abuse in American society, the nature of tolerance and dependence, drug regulation and the law, the categories of drugs (stimulants, depressants, hallucinogens, anabolic steroids, inhalants, narcotics/opiates), and their effects on the body systems. This course is appropriate for health educators who cover drug abuse in educational settings.
Prerequisite: An introductory biology course with lab.

## HLTH 360 Meaningful Play

An exploration of the contribution of play, games, and sport to meaningful human experiences, health, and wellness. Students critically analyze play, games, and sport from aesthetic, historical, philosophical, psychological, sociological, and technological perspectives. An overarching course goal is to determine, through intensive reading, writing, and discussion, what makes play, games, and sport "good."
Prerequisites: Junior Status and Completion of Gen. Ed. Domain III-A, III-B, or III-C.

## HLTH 390 Special Topics in Health and Wellness

An exploration into an identified topic in the health and wellness field. Topics vary with instructor and reflect current trends or major themes in health and wellness. This course, on a different topic, may be repeated for credit.
Prerequisites: Junior standing and HLTH 110 Wellness for Life; or permission of the instructor. Additional prerequisites may be required depending upon topic.

## HLTH 410 Personal Training

An in-depth study and application of the essential knowledge, skills, and abilities required in the field of personal training. Topics include client consultation, communication, and education; assessment of health and fitness parameters; exercise prescription and implementation; and legal and business issues. Students develop skills in assessment; consultation; program design; technique and safety demonstrations; equipment maintenance; and communication. Students are prepared for the American College of Sports Medicine (ACSM) Certified Personal Trainer exam; students must register and pay for the certification exam separately.
Prerequisites: Junior status, completion of HLTH 310 Exercise Testing and Prescription with a minimum grade of C - (1.7).

## HLTH 430 Research Methods in Health and Wellness

An introduction to research methods in health and wellness. Students learn how to develop research questions, design research studies, and analyze and interpret data. Topics may include ethics in research and qualitative and quantitative research design and analyses, including interviews, case studies, cross-sectional studies, and longitudinal studies. Note: This course is only open to majors in Health \& Wellness or Food \& Nutrition.
Prerequisites: HLTH 222 Public Health and Epidemiology and an introductory statistics course; or permission of the instructor.

## HLTH 490 Independent Study in Health and Wellness

An in-depth investigation of a specific topic relating to the student's area of interest in health and wellness. The student submits a written proposal on the topic to the supervising faculty. An oral presentation and final written report of the student's topic is required. Note: This course is only available to students majoring or minoring in Health and Wellness.
Prerequisites: Permission of the supervising instructor and the department chair.

## HLTH 495 Internship in Health and Wellness

A supervised work experience in the field of health and wellness that complements the student's concentration. An ability to work independently is expected. A major project and additional coursework are required. A minimum of 120 hours must be completed in the placement setting within one (1) semester, which equates to at least eight (8) hours per week during fall and spring semesters and at least ten (10) hours per week during summer term. Students must submit an application to the department chair prior to approval in the semester preceding.
Prerequisites: Senior standing and a minimum GPA of 2.50 in all courses for the major. Department permission required.

## HISTORY COURSES

## Lower Division Courses

## HSTY 102 The Comparative History of World Civilizations (Gen.Ed. Domain III-C)

An examination of the social, economic, political, intellectual, and cultural interactions between different world civilizations in the second millennium of the Common Era (CE) and the ways in which these interactions have shaped the contemporary world.

## HSTY 105 Europe and the World to circa 1450 (Gen. Ed. Domain III-A)

A survey of major cultural, intellectual, political, and socioeconomic developments from the beginnings of recorded history in the ancient Near East, through the Greco-Roman and medieval periods, to the mid-fifteenth century of the Common Era (CE), with an emphasis on intercultural communications, conflicts, and exchanges within Eurasia, as well as with Africa and the Atlantic World.

## HSTY 106 Europe and the World since circa 1450 (Gen. Ed. Domain III-A)

A survey of major social, economic, cultural, intellectual, political, and scientific developments in Europe since the mid-fifteenth century, including European interaction with the wider world.

## HSTY 111 United States History to Reconstruction (Gen. Ed. Domain III-A)

A political, economic, social, and cultural survey of American history in a global context from the beginning of European and Indigenous contact to the Civil War era. Topics may include: the development of racial slavery; the movement of the colonies toward revolution and independence; the formation of the Constitution; the westward expansion of the nation and its impact on Indigenous Americans and on sectional identity; shifting conceptions of race and gender; and the conflict over the institution of slavery that culminated in the Civil War and Reconstruction. Note: This course fulfills the State law requiring study of the United States and Massachusetts constitutions.

## HSTY 112 United States History since Reconstruction (Gen. Ed. Domain III-A)

A political, economic, social, and cultural survey of American history from Reconstruction to the present. The course examines the development of the United States within a global context and covers the growth of American industry, the struggle for racial and gender equity, the nation's growing international role, the Great Depression and the New Deal, the Cold War, and political and social transformations of the late 20th and early 21st centuries. Note: This course fulfills the State law requiring study of the United States and Massachusetts constitutions.

## HSTY 120 American Lives (Gen. Ed. Domain I-B)

An examination of autobiographies and memoirs by Americans both well-known and obscure. These reflections by people from diverse backgrounds who made and experienced American history provide insight and perspective on the historical periods in which they lived. Texts vary by semester.

## HSTY 123 Beasts, Battles, and Ballads: Life, Literature, and Art in Medieval

## Europe (Gen. Ed. Domain I-B)

An introduction to European culture and cultural artifacts of the Middle Ages (ca. 500-1500 AD). Students engage with a wide variety of textual, material, and artistic productions which not only reflect their unique compositional contexts but reveal the European Middle Ages to be a historical epoch characterized more by dynamism than darkness. In addition, the course challenges popular assumptions about cultural uniformity in the period and locale under consideration, emphasizing instead cultural diversity.
HSTY 133 Latin America, Independence to the Present

## HSTY 133 Latin America, Independence to the Present (Gen. Ed. Domain III-A)

A political, economic, social, and cultural survey of Latin American history since the Age of Revolutions. Topics may include: the interactions of Indigenous, African, and European peoples; independence movements and nationalism; the relationship between Latin American nations and the United States; the role of religion and the military in society; the influence of political systems such as democracy, communism, and authoritarianism; and the influence of globalization.

HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World (Gen. Ed. Domain III-C)
A survey of major social, economic, cultural, and political events in Africa from ancient Egypt to the present, with an emphasis on the relationship between geography and human history, processes of state formation, Africa's incorporation into the global economy, the colonial experience, decolonization, and the post-colonial era.

## HSTY 146 Feminism Then and Now: What does the Future Hold?

(Gen. Ed. Domain III-B)
An examination of feminist movements around the globe from the nineteenth century to the present, the meaning of feminism today, and the role feminism may play in ensuring hard-won gains for women and others in the future. Topics may include gender norms, sex, race, ability, intersectionality, violence, bodily autonomy, transgender rights, reproductive rights, workplace harassment and discrimination, and political action from the government to the streets.

## HSTY 149 Twentieth Century China (Gen. Ed. Domain III-C)

A survey of Chinese history from 1900 to the present. Students assess important political, cultural, and social changes during the last century in both the People's Republic of China (PRC) and the Republic of China (ROC). The class focuses on the effects of imperialism, the Chinese Civil War, and how the two countries have developed independently, yet linked, since 1949.

## HSTY 165 Slavery, Race, and Rights in American History (Gen. Ed. Domain III-A)

An examination of the role that racial slavery and its legacies have played in shaping America throughout its history. Topics may include: slavery and the nation's founding; abolitionism and emancipation; racial segregation; race and party politics; racially-motivated violence; institutional racism; and resistance to enslavement and racial discrimination. This course fulfills the State law requiring study of the United States and Massachusetts constitutions.

## HSTY 169 Sex and the Sixties (Gen. Ed. Domain III-A)

An introduction to what is sometimes called the "Sexual Revolution" in the 1960s-70s in Western Culture. The central question for exploration in the course is: Whose sexual revolution was it? That is, who benefited from this revolution in sexual attitudes and mores? This course examines young adults' involvement in new grassroots social movements, including the Civil Rights/Black Power, Free Speech, Counterculture, and the Antiwar movements. While students read and analyze historians' interpretations of this tumultuous period, the bulk of the course focuses on analysis of sources produced at the time, including medical documents, visual media, magazines, journals, political pamphlets, clothing, and music. Students explore popular culture as well as the two important political movements that were at the center of the discussions on sex: the Gay Liberation Movement and the Women's Movement.

## HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age of Revolutions, 1750-1850 (Gen. Ed. Domain III-A)

An introduction to the political and social upheavals that transformed the Atlantic world in the late eighteenth and early nineteenth centuries. The "Age of Revolutions" bore witness to the American, French, and Haitian Revolutions as well as a series of Latin American wars for independence. These conflicts disrupted established economies, social hierarchies, and political orders throughout the imperial Atlantic world. Together they offer a means of exploring the causes, trajectories, limits, and consequences of the revolutionary movements that gave birth to modern democratic politics and replaced a world dominated by empires with one composed of independent states. This course fulfills the State law requiring study of the United States and Massachusetts constitutions.

## HSTY 186 History of Modern Violence (Gen. Ed. Domain III-A)

A historical exploration of how violence and our understandings of it have evolved since the late eighteenth century. Various modes of violence examined may include collective acts such as warfare, terrorism, slavery, genocide, and ethnic conflict; and interpersonal violence such as child abuse, sexual assault, and street crime. Students connect changing forms of violence to modern historical forces such as industrialization, colonialism, racism, mass politics, and social movements. The course thus provides a way of exploring how an otherwise abstract category of human behavior, violence, is embedded in and defined by its historical time and place.

## HSTY 225 The Historian's Craft

An introduction to the nature of history as a discipline through analysis of the approaches, methods, and interpretations of historians. NOTE: Required of all history majors. Students should plan to take this course no later than the first semester of their sophomore year or in their first semester as a history major, if entering the major with sophomore standing or above.
Prerequisite: one (1) 100-level history course; or permission of instructor.

## HSTY 250 Historical Research and Writing

An introduction to the methods and practice of historical research and writing. NOTE: Students should plan to take this course in their sophomore year.
Prerequisites: Sophomore standing, HSTY 225 Historiography, and two (2) 100-level History survey courses; or permission of instructor.

## Intermediate Division Courses

## HSTY 290A Special Topics Seminar in American History

A seminar in which a small group of students engages in a special topic in history given at the discretion of the department. Topics, which vary with instructor, include emphasis on developing a critical and analytical understanding of the subject under consideration together with its relevant historiography. No more than two (2) topics courses may be used to satisfy the departmental requirements for history majors.
Prerequisite: One (1) 100-level history course.

## HSTY 290E Special Topics Seminar in European History

A seminar in which a small group of students engages in a special topic in history given at the discretion of the department. Topics, which vary with instructor, include emphasis on developing a critical and analytical understanding of the subject under consideration together with its relevant historiography. No more than two (2) topics courses may be used to satisfy the departmental requirements for history majors.
Prerequisite: One (1) 100-level history course.

## HSTY 290 Special Topics Seminar in World History

A seminar in which a small group of students engages in a special topic in history given at the discretion of the department. Topics, which vary with instructor, include emphasis on developing a critical and analytical understanding of the subject under consideration together with its relevant historiography. No more than two (2) topics courses may be used to satisfy the departmental requirements for history majors.
Prerequisite: One (1) 100-level history course.

## HSTY 301 Ancient Greece: From the Homeric through the Hellenistic Age

An examination of the history of ancient Greece. Topics include the society and thought of the Homeric period; the rise of the polis and the thought of the Archaic age; the Persian wars, the Athenian empire, Periclean Athens, the Peloponnesian wars, and the thought of the fifth century; the empire of Alexander the Great and the thought of the Hellenistic age.
Prerequisite: Sophomore standing and one 100 -level history course, or permission of instructor.

## HSTY 302 Colonial America

A study of the encounters between peoples of African, European, and Indigenous descent in North America between the late fifteenth and eighteenth centuries. Topics may include conquest, colonization, and cultural exchange; shifting cultural, gender, and spiritual norms; regional variations in economic, political, and social development; labor systems, including indentured servitude and chattel slavery; the construction of creole and racial identities; and the contested and negotiated nature of imperial authority.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 303 Native American History, 1500-1800

An exploration of the history of the indigenous peoples of the Americas from first contact to the Age of Revolutions. The course focuses on native cultures of North and South America, the consequences of contact with European explorers and settlers, and the accommodation and resistance of native peoples as the Americas became sites of struggle among European imperial powers.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 304 Revolutionary America

A wide-ranging exploration into the causes, conduct, and outcomes of the American Revolution between 1750 and 1800 . The course engages with intellectual debates about political power, liberty, and freedom; political and social action across race, class, and gender lines; warfare and diplomacy; and the contest for empire in the context of the Atlantic world.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 305 Ancient Rome: The Republic and the Empire

An examination of the history of ancient Rome from the founding of the Republic to the collapse of the Empire. Topics include the evolution and decline of the Republic, its concept and institutions of government; the reign of Julius Caesar and the rise of Caesarism; the rise of Augustus and the formation of the Empire; relations of the Empire to the Christian church; the decline of the Empire; and the reigns of the emperors Diocletian, Constantine, and Theodosius. The contributions of Rome in the fields of political, constitutional, and legal thought and institutions are stressed.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 306 The Early American Republic

An examination of the early United States from the end of the Revolutionary War through approximately 1848, as Americans sought to transform the contentious legacy of the American Revolution into a functioning nation. The course focuses on the development of American politics, society, and culture, with a particular emphasis on developments in economic life, religion, race, and gender.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 308 American Civil War Era

An intensive analysis of the social, political, and economic factors in antebellum America that led to the Civil War, the war itself, and the problems of reconstructing the nation after the war. In discussions of each of these distinct and yet interrelated periods, the course explores the actions, experiences, and belief systems of people of all races and walks of life alongside the actions of political and military leaders.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 309 Modern United States History: 1945 to the Present

An in-depth study of the United States since 1945. Topics examined may include, the Cold War, the rights revolution, social, cultural, and political changes wrought by the Vietnam Era and Watergate, the rise of the New Right, and the disintegration of the New Deal social contract.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 313 Civil Rights Movements in the United States

An examination of the civil rights movements in the United States during the twentieth century with particular emphasis placed on the post-World War II period. Defining civil rights broadly, this class analyzes the struggles of marginalized racial and ethnic groups, LGBTQ+, and people with disabilities to achieve equality in American society.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 317 The Family in America Life

An examination of the composition and roles of families throughout American history, including variations in both lived experience and societal expectations by period, region, class, race, and ethnicity. Special attention is given to how the idea of the family and the "proper" ordering of its members has contributed to cultural understandings of masculinity and femininity, childhood and adulthood, sexuality, and citizenship.
Prerequisite: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 318 The First World War: Conflict, Culture, and Society

An introduction to the military, social, and cultural history of one of the defining conflicts of the modern era. The course examines societies and military theaters in Europe and the Middle East during the First World War and addresses United States involvement in the conflict. Special focus is placed on major issues raised by the war, including violence against noncombatants, changing gender relations, the collapse of major empires, and the contentious politics and cultures of war remembrance.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 321 European and American Muslims: A History

A study of Muslim communities that have constituted integral parts of European and American life for centuries, while often construed as outsiders to it. Major cases to be explored may include alAndalus and the Reconquista, the Ottoman Empire and its successor states in the Balkans, immigrant communities in $20^{\text {th }}$ century Western Europe, and the role of Islam and Muslims in America from the Revolutionary era to the present.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 323 African-American History

An examination of African-American history from the colonial era to the present. Topics include the rise of chattel slavery, the influence of African-Americans on the American economy, the evolution of Jim Crow, the rise of the Civil Rights Movement of the twentieth century, the effects of constitutional and legal changes, and contributions of African-Americans to American culture. Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 329 The Viking Age

An examination of the political, cultural, and social history of the Scandinavian peoples of Europe circa $750-1100$ Common Era (CE). Topics include the political impact of the Viking raids on the polities of Western and Eastern Europe, the conversion of the Scandinavians to Christianity, and the Viking settlement of Iceland, Greenland, and North America.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 331 Harding to Roosevelt: The United States 1920 to 1945

An in-depth study of the interwar years and World War II. Topics examined may include cultural changes of the 1920 s , labor and social unrest, the Republican ascendancy, the Great Depression, the New Deal, class conflict, systemic racism, and World War II at home and abroad.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 337 Caribbean History

An examination of the history of the Caribbean islands from European conquest to the present. Topics may include conquest, colonization, and cultural exchange; piracy, smuggling, and trade; slavery and plantation growth; the Haitian Revolution; slave emancipation; industrial development and decolonization; the Cuban Revolution; and the enduring effects of imperialism on the region. Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 340 Industrial Conflict in the United States

An examination of the conflict between workers and their employers from the early twentieth century to the present. Topics may include the emergence of working-class culture, workers' responses to growing corporate power, racial inequalities in the work place, corporate reaction to the growth of unions, efforts to suppress workers' rights, and the roles that federal and state governments have played in the ongoing confrontation. Major labor strikes, employee/employer conflicts, the effects of government policies on the labor movement, and corporate strategies to maintain hegemony are examined.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 341 The Consequences of War on Modern America

An examination of the consequences that the United States' wars have had on its history from the Civil War to the 21 st century. From expansions in industry, equal rights, and the middle class to the rise of xenophobia and nationalism, wars have affected the United States in numerous ways that go far beyond the battlefields. This course assesses civil rights debates and the social, political, and economic changes that wars from the Civil War to the worldwide War on Terror have brought to the United States.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 345 Networks and Empires - Economic History of the Atlantic World

An exploration of the economic, business, and social history of the Atlantic world from 1450-1800. The course examines developments in Europe, Africa, and the Americas, with special attention to the interactions and competition among the British, French, Spanish, Portuguese, and Dutch empires. Topics may include: the economic ideologies that underlay European imperial expansion, technologies of transportation and communication, the economics of slavery, trading encounters with Native peoples, the impact of piracy and illicit trade, and changing ideas about consumption.
Prerequisite: Sophomore standing and one 100 -level history course, or permission of instructor.

## HSTY 349 The "Sixties" in Europe and the United States

A comparative study of the era known as "The Sixties" in Europe and the United States. The course focuses on the political, cultural, and social upheaval wrought by the rise of the "New Left" and the successes/failures of the numerous social movements for civil and political rights for marginalized groups, including so-called "third world" people involved in struggles for independence, African Americans, women, and LGBTQ+ people. The political and social turmoil of 1968 serves as a focal point for analyzing the period.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 350A Topics in American History

A special topic in American history to be given at the discretion of the Department. Course topic is determined by the instructor with an emphasis on developing a critical and analytical understanding of the subject under consideration, including relevant historiography. No more than two topics courses may be used to satisfy the departmental requirements for history majors. When topics courses are to be offered, the faculty member presenting the course and its subject is announced during the prior semester. This course is not part of the Department's regular curriculum.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 350E Topics in European History

A special topic in European history to be given at the discretion of the Department. Course topic is determined by the instructor with an emphasis on developing a critical and analytical understanding of the subject under consideration, including relevant historiography. No more than two topics courses may be used to satisfy the departmental requirements for history majors. When topics courses are to be offered, the faculty member presenting the course and its subject is announced during the prior semester. This course is not part of the Department's regular curriculum.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 350W Topics in World History

A special topic in World history to be given at the discretion of the Department. Course topic is determined by the instructor with an emphasis on developing a critical and analytical understanding of the subject under consideration, including relevant historiography. No more than two topics courses may be used to satisfy the departmental requirements for history majors. When topics courses are to be offered, the faculty member presenting the course and its subject is announced during the prior semester. This course is not part of the Department's regular curriculum.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 356 Holocaust and Genocide in the $20^{\text {th }}$ Century

An examination of the history of genocide in the 20th century. Special attention is given to genocide theory, the history of the concept of race, and the themes of resistance and memory. With an initial focus on the Holocaust, the course examines a wide range of genocides across Europe, Asia, Africa, and the Americas.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 359 Slavery and Abolition

An exploration of the history of slavery and abolition in different parts of the world with a particular focus on the period from the sixteenth century to the present. Students examine the different forms of slavery and the nature and dynamics of slave life with an emphasis on analyzing power relationships in slave societies and how and why such societies changed through time. Topics to be studied may include: slave trading; slave labor and culture; gender and slavery; slave resistance and rebellion; race, ethnicity, and identity; abolitionism and slave emancipation; and modern slavery.
Prerequisite: Sophomore standing and one 100 -level history course, or permission of instructor.

## HSTY 360 Media and Communications in American History

An examination of the historical development of American media and communications from the eighteenth century to the present. The course focuses on the business and political factors that underlay the production and circulation of information throughout American history, how Americans consumed information, and the effect it had on historical events and cultural trends. Topics covered may include: debates about the role of partisanship and objectivity in the press; the creation and operation of the post office; the rise of corporate media; and the effect of new technologies-such as the railroad, the telegraph, the television, and the internet-on American life.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 365 The History of Gender, Sexuality, and the Body

An analysis of the history of gender, sexuality, and the body in European history. Topics covered may include religious views of gender and sexuality, sexuality and the state, the growth of sexology as an academic discipline, and the changing meanings and significance of sex and the body. In this course, students also gain an understanding of the centrality of course themes to the study of religion, the state, and the family in any historical time period.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 369 History of the Crusades

An examination of the Crusades, an experiment in religious warfare that stretched from the eleventh century to the Protestant Reformation. Topics include the development of theories of Holy War in Christianity and Islam, the motivations of those who fought on both sides of this lengthy conflict, and the long-term implications of the Crusades for relations between the adherents of Judaism, Christianity, and Islam. The course emphasizes the place of the Crusades within the wider context of European and Near Eastern History.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 371 Women in Europe, 1500 to 2000

An historical examination of women's lives and ideas of gender in Europe. Through an analysis of social, economic, political, religious, intellectual, and cultural developments, this course explores how women have both experienced and shaped European history. Topics covered may include women's political action, work and the economy, religion, feminism, and family life. Students thus gain a greater understanding not only of women's lives, but also of the ways in which one can study the history of women and gender.
Prerequisite: Sophomore standing and one 100 -level history course, or permission of instructor.

## HSTY 376 History of Modern France

An analysis of key issues in French history from the French Revolution to the twenty-first century. Topics to be studied may include the Revolution, imperialism and warfare during Napoleon's reign, the nineteenth-century political revolutions, the Great War, the Depression and Popular Front, the German occupation and the Vichy Régime, the Liberation and the Fourth Republic, Decolonization and the end of Empire, De Gaulle and the Fifth Republic, and France and the European Union. Themes that run throughout the course include the disappearance of traditional rural society, French citizenship, immigration, challenges facing Muslim and Jewish communities, and transformations in gender roles.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 377 History of Medicine and Society in the West - From the Ancient World to Present

A historical examination of health, illness, and disease in the West. The course addresses innovations in medical practice, the ways in which practitioners have both conceived of and treated patients, and patients' experience with health care. The course situates the history of medicine within the context of developments in the realm of science and technology.
Prerequisites: Sophomore standing and HSTY 154 Europe and the World since circa 1450; or permission of instructor.

## HSTY 378 History of the United Kingdom from 1800

A study of the social, economic, cultural, and political history of the United Kingdom from the nineteenth century to the present. Topics examined may include the Industrial Revolution, Irish Home Rule, the role of race in British imperialism and de-colonization, as well as the two world wars, the welfare state, Thatcherism, and Brexit.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 380 History of Modern Germany

A study of Germany from the mid-nineteenth century to the present. Areas of focus may include the Liberal Revolutions of 1848, German unification under Bismarck, the Imperial Era, the two world wars and the Holocaust, West and East Germany during the Cold War, reunification, and Germany's role in the European Union and the world. The roles of racism, fascism, and communism in German history are explored.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 381 Remaking Europe: History, Politics, and Culture Since World War II

An examination of European history since the end of World War II. In this course students analyze how the politics, culture and society of both Western and Eastern Europe have been transformed since 1945. Topics covered may include the legacy of fascism, the Cold War, decolonization, the emergence of the European Union, the rise and fall of communism, and immigration from formerly colonized countries in Asia and Africa. Special focus is placed on the diversity of European identities and how they have changed since 1945.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 382 Empires in Collision: Southeastern Europe, 1683 to the Present

A study of the Balkan-Anatolian unit since 1683. Emphasis is placed upon the emergence of the Balkan national states, the evolution of native cultures, problems of ethnicity, class, and gender, the involvement of such great powers as Austria and Russia in the region, and the profound changes since World War II. Note: Credit will not be given for both this course and HSTY 382 The Modern Balkan World.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 383 Making of the Modern Middle East

An examination of political, social, and cultural developments in the Middle East since circa 1500 Common Era (CE). The course covers the rise and fall of the Ottoman and Iranian imperial dynasties, the impact of European imperialism in the region, and modern national, constitutional, and Islamic movements. Students explore historical perspectives on topics that arise frequently in contemporary discussions about the Middle East, including the role of religion in politics and society, the role of gender, and encounters between the Middle East and other regions.
Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## HSTY 384 Revolutionary France (1750-1815)

An examination of the political, social, and economic changes France experienced from 1750 to 1815, known as the Revolutionary Era in France. Many historians identify the French Revolution of 1789 as the historical event that marks the birth of the "modern world".
Prerequisites: Sophomore standing and one (1) 100-level history course and sophomore standing, or permission of instructor.

## HSTY 386 Women in American History

A study of the roles and experiences of women throughout American history. Topics include society's stereotypes of women; women's social, family, and work roles; women's activism; and the effect of legislative and constitutional changes on women. Attention is paid throughout to the ways factors such as class, race, ethnicity, religion, region, age, and marital status impacted women's experiences.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 388 Peter to Putin: The History of Modern Russia

A study of major political, social, and cultural developments in Russia and its foreign relations from the eighteenth to the twenty-first century. Topics may include Russia's modernization under Peter the Great; cultural transformation and imperialism over Asian and European peoples during the nineteenth and twentieth centuries; the Russian Revolution; communism under Lenin, Stalin, and their successors; World War II and the Cold War; the fall of the Soviet Union and rise of a new authoritarianism.
Prerequisites: Sophomore standing and one (1) 100-level history course; or permission of instructor.

## HSTY 394 The History of Late Antiquity

An examination of one of the most dynamic and transformative periods in world history. Topics include the Christianization of the Mediterranean world, the disappearance of Roman imperial rule in the West and the emergence of post-Roman kingdoms, Byzantine politics and society, the rise and spread of Islam, and the return of imperial rule in Western Europe under Charlemagne. Prerequisite: Sophomore standing and one 100-level history course, or permission of instructor.

## Upper Division Courses

## HSTY 450 Seminar in History

A course in which a small group of students engages in advanced study and original research under the direction of a member of the faculty. In addition to their individual research projects, the students may be expected to produce and to discuss such assignments as book reviews and bibliographic essays. The course is open only to students who are junior, senior, or post-graduate history majors. No transfer course can fulfill this seminar requirement. Topics vary with the instructor, and are announced for a two-year period. Students may take the Seminar multiple times for 300 -level credit. However, in no case may a student take two seminars on the same topic.
Prerequisites: HSTY 250 Historical Research and Writing, and three (3) 300-level history courses; or permission of instructor.

## HSTY 490 Independent Study in History

An opportunity for a student to work independently with a faculty member on a mutually-agreed upon topic. To enroll in an independent study, a student must determine the topic of study in consultation with the faculty member under whose supervision the independent study is to be conducted and have it approved in writing by both the faculty supervisor and the department chair. History majors may take no more than two (2) independent studies as part of the intermediatedivision courses required for the History major. History minors may use no more than one (1) independent study towards completion of the History minor.
Prerequisites: History major or minor with junior or senior standing; minimum GPA of 2.75 overall and 3.00 in history courses; and completion of at least three (3) courses in history.

## HSTY 495 Internship in History

A supervised practical experience in a public or private institution appropriate to the student's program of study. A minimum of 140 on-site hours are required. Students interested in an internship should consult with the department internship coordinator prior to submission of application materials. Students are evaluated by the faculty supervisor with input from the site supervisor. An approved internship may substitute for one (1) intermediate-level major or minor elective. A student may not enroll in an internship more than twice.
Prerequisites: Junior or senior History major or minor; GPA of no less than 2.75 in History courses; and approval of the Chair of the History Department and the faculty internship supervisor.

## HOSPITALITY AND TOURISM MANAGEMENT COURSES

## HTMG 100 Field Experience in Hospitality and Tourism (non-credit)

A non-credit 200-hour minimum field experience in foodservice, hotel, tourism, or other hospitality setting approved by the Program Coordinator. A written evaluation of the student's performance is required from the student's employer. This field experience is required prior to taking a 200 -level HTMG course.
Prerequisite: Acceptance in the Hospitality and Tourism Management major prior to registering for course.

## HTMG 101 Introduction to Hospitality and Tourism (Gen. Ed. Domain III-B)

An introduction to the hospitality and tourism industries including their scope, historical development, and emerging trends. The course provides an overview of management functions in key areas including service, tourism, travel, business ownership and development, lodging, food and beverage, recreation and leisure, gaming, and meetings, events, and conventions. This course also investigates the economic, socio-cultural, and environmental impacts of the hospitality and tourism industry.

## HTMG 113 Economics of Hospitality and Tourism

A survey of macroeconomic and microeconomic principles in the context of the hospitality and tourism industry. This course considers the following topics: national income accounting, employment, recession, inflation, fiscal policy, monetary policy, stabilization problems, scarcity and choice, supply and demand, cost theory, price and output decisions by the firm under perfectly and imperfectly competitive conditions, and factor pricing.

## HTMG 128 Exploring Massachusetts Heritage Tourism

An introduction to Massachusetts' multicultural past in relation to hospitality management and heritage tourism. Students are exposed to the management and operations of heritage tourism venues. Students are exposed to the management and operations of heritage tourism venues, introducing business concepts such as management, marketing, accounting and finance, in conjunction with the stories of people and events relevant to heritage sites. The course addresses both hospitality management and the state's past. Teaching methods include but are not limited to required field trips, readings, lectures, discussions, and guest lecturers.

## HTMG 202 Food and Beverage Management

A study of current trends and practices in the management of foodservice operations. The course includes the foodservice functions of menu design, purchasing, production, service, safety and sanitation, computer applications, and facilities. Key concepts including leadership, beverage management, service, human resources and financial management are covered. Standard industry software applications for managing food and beverage are examined. Students must be eligible and are required to complete the $\operatorname{Serv} \operatorname{Safe}(\mathrm{R})$ food safety and serving alcohol examination at the expense of the student (if they are not currently certified).
Prerequisites: HTMG 100 Field Experience in Hospitality and Tourism, HTMG 101 Introduction to Hospitality and Tourism, and BUIS 200 Intro to Business Systems (may be taken concurrently).

## HTMG 212 Hotel and Lodging Management

An introduction to the operations and technology of the room division within hotel properties. The course explores theoretical principles, operational tactics, and computer applications for management of the front office, reservations, housekeeping, and engineering functions. The course emphasizes quality assurance, guest satisfaction, and process improvement. Standard industry software applications for managing hotel operations are examined.
Prerequisites: HTMG 100 Field Experience in Hospitality and Tourism, HTMG 101 Introduction to Hospitality and Tourism and BUIS 200 Intro to Business Systems (may be taken concurrently).

## HTMG 222 Sales and Marketing for Hospitality and Tourism

An exploration of the role and function of sales and marketing in the hospitality and tourism industry. The course introduces specialized principles for the industry including forecasting, dynamic pricing, revenue management, digital, social media, and international marketing. Standard industry software applications for managing sales and marketing are examined.
Prerequisites: HTMG 100 Field Experience in Hospitality and Tourism, HTMG 101 Introduction to Hospitality and Tourism, and MRKT 181 Marketing Principles.

## HTMG 303 Financial Management for the Hospitality Industry

A study of the quantitative techniques of control and analysis, including computer applications, in all aspects of the hospitality industry. The primary emphasis of the course is on analytical and decisionmaking uses of financial information, including cost behavior, leverage, cost-volume-profit analysis, dynamic pricing, and budgeting. Diverse areas such as inventory, restaurant and retail point-of-sale, room sales and marketing, and cash management are included in a comprehensive study of the concepts, strategies, processes, hardware, and software used to make operational decisions regarding investment and financing.
Prerequisite: ACCT 221 Introduction to Managerial Accounting.

## HTMG 313 Human Resources Management for the Hospitality and Tourism Industry

A study of contemporary human resource management relative to the hospitality industry with emphasis on labor planning, job analysis, scheduling, dealing with organized labor, and ethnic diversity in the workplace. The course explores employee motivation, leadership, training, team building, employee performance, and retention. Management philosophies of work compensation, discipline, and labor relations are discussed as they affect current hospitality industry strategies to attract and retain a quality workforce.
Prerequisite: MGMT 280 Organizational Behavior.

## HTMG 323 Hospitality and Tourism Law

An examination of the fields of law specifically relevant to the management of hospitality and tourism business. Topics include contracts, torts, product liability, liquor liability, guest privacy rights, real estate acquisition/management, franchising, and related ethical considerations.
Prerequisites: HTMG 202 Food and Beverage Management and HTMG 212 Hotel and Lodging Management.

## HTMG 404 Facilities Management in Hospitality and Tourism

An examination of hospitality and tourism facilities and systems, emphasizing managerial roles in designing, maintaining, and troubleshooting the operations. The course develops competencies in the areas of organizing property management records and routines, protection of public and employee comfort and safety, conservation of physical assets, productivity standards, training, specific building facilities, land-use planning, and engineering utility systems.
Prerequisite: HTMG 323 Hospitality and Tourism Law.

## HTMG 450 Seminar in Hospitality and Tourism

A study of advanced topics in hospitality and tourism management, in particular, marketing, human resources, facilities management, and strategy. Current issues in hospitality and tourism management are also addressed. Note: This course is open to Hospitality and Tourism majors only.
Prerequisite: HTMG 323 Hospitality and Tourism Law and senior standing, or permission of instructor.

## HTMG 495 Hospitality and Tourism Practicum (2 course-credits)

A 400 -hour field experience in the hospitality and tourism industry combined with academic requirements. Students must attend an information session the semester before the planned practicum. Students are responsible for identifying the practicum location, gaining site approval from both on-site and faculty supervisors, developing goals and objectives for the practicum, writing two management reports and learning journal entries, and delivering an oral presentation at the end of the semester based on their experience.
Prerequisites: Senior standing, GPA of 2.50 or higher, and permission of instructor. Hospitality and Tourism majors only.

## INTERDISCIPLINARY STUDIES COURSES

## INTD 101 Topics in Interdisciplinary Studies

An introductory-level examination of a contemporary issue in an interdisciplinary manner. An issue such as COVID-19, the rise of white supremacy, or the Flint Water Crisis is examined from multiple disciplinary perspectives such as the historical, sociological, mathematical, biological, educational, and economic. Students read recent research, apply knowledge, and evaluate evidence from each discipline related to the issue being studied and complete projects that draw upon the interdisciplinary connections. Emphasis is placed on the multidisciplinary approach and the interrelated nature of pursuing understandings and solutions to an ongoing challenge. The contemporary issue addressed varies each time the course is offered.

## IRISH STUDIES COURSES

## IRST 290 Special Topics in Irish Studies

An exploration of a special topic in Irish studies. Topics change each time the course is offered and may include such subjects as the Irish political ballad, the Northern Ireland peace process, or performance art in contemporary Ireland. This course, on a different topic, may be repeated for credit. Prerequisite: ENWR 110 Composition II.

## LIBERAL STUDIES COURSES

## LIBS 250 Introduction to Research Methods

An introduction to interdisciplinary research methodology. Students learn how to conduct a scholarly literature review, develop a research question, and use primary and secondary data sources. The ethics of scholarly research and the research design process are explored. The research topic varies each semester.
Prerequisite: Sophomore standing or permission of instructor. Liberal Studies Majors only.

## LIBS 450 Seminar in Liberal Studies

A capstone seminar in which students engage in advanced study and research under the direction of a faculty member. In addition to completing a major research project, students may be expected to present their conclusions in a scholarly setting. The research topic varies each semester for each section of the class.
Prerequisites: LIBS 250 Introduction to Research methods and senior standing; or permission of Liberal Studies Program Coordinator. Liberal Studies Majors only.

## LIBS 490 Independent Study in Liberal Studies

An opportunity for a Liberal Studies major to work independently with a faculty member on a mutually agreed upon topic. To enroll in an independent study, a student must determine the topic of study in consultation with the faculty member under whose supervision the independent study is to be conducted. The topic of study must be approved in writing by both the faculty supervisor and the Liberal Studies Coordinator in the semester prior to taking the course. Liberal Studies majors may take no more than two (2) independent studies in fulfillment of their major requirements. Open to Liberal Studies Majors only.
Prerequisites: Junior or senior standing; LIBS 250 Introduction to Research Methods; and a minimum overall GPA of 2.75 .

## LIBS 495 Internship in Liberal Studies

An internship for Liberal Studies majors. The internship is limited to junior and senior Liberal Studies majors who have a GPA of no less than 2.50 . The internship must be in one of the academic disciplines in the student's concentration. As a supervised internship experience, it is offered in cooperation with participating institutions or individuals who agree to provide professional guidance for student-interns. Students may take the internship for up to two (2) credits towards their concentration requirements. Students are expected to work approximately 10 hours a week during the internship and may be asked to complete related assignments by the faculty supervisor. Students must have the internship proposal approved by their academic advisor and permission of Liberal Studies Program Coordinator prior to beginning the experience. Prerequisites: Junior standing; Liberal Studies Majors only.

## LINGUISTICS COURSES

## LING 110 The Languages of the World (Gen. Ed. Domain III-C)

A global perspective of the 5,000 or so languages spoken today. The course examines the fundamental structure of human language and the factors involved in language diversity. Major topics include: the internal organization of language, the genetic and structural relationships of the world's major languages, myths and misconceptions about language, the writing systems of the world, linguistic trends in multilingual societies, and the effect of mass communication on world linguistic geography. Related topics include bilingualism, literacy, language planning, and language policies, with an emphasis on non-Western European languages and cultures.

## LING 200 Language and Linguistics (Gen. Ed. Domain III-C)

An examination of human language and its essential linguistic features. Students explore descriptive and philosophical perspectives in the field of linguistics such as Structuralism, Universal Grammar, speech genres, and also analyze the phonology, morphology, syntax, semantics, and pragmatics of different languages. The study of linguistic approaches and features guides a reflection about language acquisition and learning, language and culture, and language and society.

## LING 490 Independent Study in Linguistics

An in-depth investigation of a topic in any of the sub-fields of linguistics including phonology, morphology, syntax, discourse, language acquisition, bilingualism, sociolinguistics, language change, and historical linguistics. The topic is selected by the student under the guidance of a member of the World Languages Department. Limited to juniors and seniors.
Prerequisite: Permission of Department Chair.

## LING 495 Internship in World Languages and Linguistics

A supervised internship experience which complements the course work of the student in a field study setting. The experience requires individual consultations with the advisor and a research project. Admission to the internship is limited to seniors from the World Languages and Linguistics major and requires a 2.50 GPA . The internship counts as one towards the major core requirement.

## MANAGEMENT COURSES

## MGMT 215 Legal Environment of Business

A study of the interrelationships among business, government, and society as reflected in the legal system in which firms operate. Students examine specific laws and legal issues, including contracts, the Uniform Commercial Code (sales and leases), tort law, and criminal law, as well as laws and regulations pertaining to employer-employee relations. Special emphasis is on the social and ethical issues that arise in business law.

## MGMT 242 Globalization of Business

An examination of the nature and processes of globalization that define today's international business environment. The course employs a multidisciplinary perspective to explore the growing interdependence of nations in their trade, investment, technology flows, and business operations. Using a globalization model, a range of domains are covered, including business, geographic, economic, social, cultural, political, and other matters related to globalization and business. Current global issues are discussed. Prerequisites: Sophomore standing.

## MGMT 280 Organizational Behavior

An in-depth study of the application of management theory to the behavior of individuals and groups in organizations. Topics in the course include: organizational culture, decision making, teamwork, organizational structure and design, change management, motivation, job design, leadership, communication and power in organizations.
Prerequisite: Sophomore standing.

## MGMT 300 Doing Business Abroad

An examination of the critical success factors for doing business in a foreign country. In this global seminar course, students prepare to conduct business and travel to a foreign country by exploring, in the classroom, all the major international business areas including marketing, finance, operations and human resources related to the country of study. Cross cultural differences and business etiquette are also emphasized. The optional travel portion of the course is typically an 8-14 day academic trip to a selected country where students meet with businesses to practice what they have learned and experience the local culture by attending selected events. If travel is selected, travel costs are additional. Note: A student can receive credit for this course more than once if the country studied is different. However, students may receive credit for this course toward the major only once.
Prerequisites: Sophomore standing and completion of any course from the Management department.

## MGMT 308 Managing Across Cultures

An examination of how cultural difference impacts business interactions. Students learn techniques for interacting effectively with people from different countries and cultures who are part of the same multinational company and how to identify and respond to cultural differences when negotiating across cultures and working with multicultural teams. Topics include the nature and dimensions of culture, managing cultural differences, the dynamics of intercultural communication, and global perspectives on leadership, motivation, and decision making.
Prerequisite: MGMT 280 Organizational Behavior.

## MGMT 372 Operations Management

An analysis of methods for efficient production and distribution of goods and services by profit and nonprofit organizations. Topics covered include supply chain management, logistics, customer demand forecasting, use of technology in operations, inventory management, product design, process selection, production planning, quality control, waiting line management, and project management.
Prerequisites: MGMT 280 Organizational Behavior and one of the following courses: BUAN 204 Analytical Techniques for Business or MATH 217 Business Calculus or QUAN 202 Statistical Analysis for Business and Economics.

## MGMT 381 Human Resource Management

A study of the personnel function within profit and non-profit organizations. The course covers the procurement, development, compensation, integration and maintenance of personnel.
Prerequisite: MGMT 280 Organizational Behavior.

## MGMT 390 Topics in Business

Selected topics in an area of business offered on occasion at the discretion of the department. This course, on a different topic, may be repeated for credit.
Prerequisite: Sophomore standing.

## MGMT 401 Project Management

An examination of the fundamentals of project management, the basics of managing complex projects across multiple functions. Successful project managers possess the skills to manage people, schedules, risks, and resources to produce a desired outcome. Students learn the skills and tools of project management with a practical, hands-on approach. The course guides students through many of the fundamental project management tools and behavioral skills required for profit and nonprofit organizations. Topics include common tools and frameworks used in industry, such as Six Sigma ${ }^{\circledR}$. Prerequisite: MGMT 372 Operations Management.

## MGMT 409 Supply Chain Management

An examination of basic principles of supply chain management and techniques used to analyze various aspects of logistics systems. The course utilizes key tactics such as risk pooling and inventory placement, integrated planning and collaboration, and information sharing. Key concepts such as lean management, inventory management, communication, warehousing, distribution, and facility location are examined as an integral part of modern business. The course addresses insights, concepts, practical tools, and decision support systems that are important for the effective management of the supply chain.
Prerequisite: MGMT 372 Operations Management.

## MGMT 412 International Business

A study of the complexity of managing an organization with international interests. Topics discussed include political, economic, and cultural environments; developing planning systems and strategies to ensure international competence in finance, marketing, human resources, production, and societal response in an international setting. Case studies may be used to help develop skills in these competencies.
Prerequisite: MGMT 280 Organizational Behavior; MGMT 242 Globalization of Business or MGMT 308 Managing Across Cultures; and MRKT 181 Marketing Principles.

## MGMT 416 Organization Leadership

An exploration of organization leadership, leadership development, and leadership practice. The course analyzes leadership theories, concepts, and research in management. Emphasis is placed on understanding personal traits, values, and characteristics; and performing developmental tasks as a foundation for organizational leadership and managerial development.
Prerequisites: Senior status and MGMT 280 Organizational Behavior.

## MGMT 485 Business Policy and Strategy

An examination of the formulation and execution of corporate and organizational strategy in business enterprises. The course focuses on the application of organizational planning tools and analysis of general manager tasks when implementing corporate and organizational strategy. The course relates to the business areas of marketing, accounting, management, finance, personnel, and production. Strategic policy and ethical issues from the viewpoint of management in both domestic and international organizations are covered. Current events and their relation to the course topics and problems affecting the success of an organization are analyzed and discussed. Cases drawn from companies of various sizes in various industries are used.
Prerequisites: ACCT 221 Managerial Accounting, BUIS 200 Introduction to Business Systems, FINA 248 Managerial Finance or HTMG 303 Financial Management for the Hospitality Industry, MGMT 280 Organizational Behavior, MRKT 181 Marketing Principles, and Senior standing; or permission of the instructor.

## MGMT 490 Independent Study in Business

Under the direction of a faculty member, the student pursues reading and research on a selected topic in business.
Prerequisite: Permission of the instructor.

## MGMT 495 Internship in Management

A supervised practical experience in a public or private organization appropriate to the student's program of study. Before registering for the internship, the student must submit a proposal outlining the internship and showing how it integrates with the student's academic program. The internship requires written documentation of the student's experiences and a research project or critical evaluation of the experience. Students may earn up to four (4) course-credits. The internship is not intended to satisfy or substitute for any of the courses required for the major.
Prerequisite: A minimum of 3.00 GPA overall and 3.20 in department courses and approval of the internship supervisor. The grade point requirement may be waived at the discretion of the intern's internship supervisor.

## MARKETING COURSES

## MRKT 181 Marketing Principles

An introductory marketing course that examines segmentation, differentiation, target marketing and positioning in the context of the marketing mix. The marketing mix or 4Ps - Product, Price, Place, Promotion - are taught in light of today's complex global environment. Students analyze a marketing opportunity and develop a marketing plan to satisfy the needs and wants of the target market. Using spreadsheets, students generate appropriate financial metrics in support of the marketing plan.

## MRKT 218 Personal Branding and Business Etiquette

A study of the principles of personal branding and proper business etiquette. This course is designed to equip students with necessary techniques and skills for defining and developing their personal brand as well as providing them with the basic tools to give them a competitive advantage in the business world. Branding is discussed in the context of the global business world, diverse audiences, and culturally-appropriate business etiquette.
Prerequisites: MRKT 181 Marketing Principles or permission of the instructor.

## MRKT 240 Consumer Behavior

An examination of demographics, lifestyle, social and cultural trends, and their impact on consumer motivations and behavior in a variety of contexts. The course draws on theories developed in the social sciences and builds a bridge to marketing. Drawing from a range of different sources -including popular press books, academic papers, and current news articles -- students analyze consumer perceptions, motivations, and decision processes.
Prerequisites: MRKT 181 Marketing Principles or permission of the instructor.

## MRKT 301 Brand Management

An analysis of the main factors determining success of a brand in the market and is an introduction to techniques and tools necessary for management of brands. Using a consumer centric approach, students develop the ability to think creatively and critically about the strategies and tactics involved in building, leveraging, defending, and sustaining inspired brands. The importance of brand, brand building, brand definition evaluation, brand positioning, strength and profitability, evaluating brand maturity, repositioning of brands, rebranding, the link between corporate brand image and corporate identity are discussed.
Prerequisite: MRKT 181 Marketing Principles.

## MRKT 308 Digital and Social Media Marketing

A study of technology and digital media marketing. Students explore how digital and social marketing affect the marketing of goods and services and how new mediums deliver value to the customer using the latest technological innovations. This course examines the latest trends in digital marketing, such as mobile marketing and how the mobile platform can be used for branding purposes and enhancing customer relationships. Students explore topics such as branding and advertising via mobile phones, online social networks and communities, technology adoption in global emerging markets, and how the Internet empowers customers and enables firms to engage in customer advocacy. Students examine technological innovations and the ethical concerns that arise with technology usage, such as privacy and security issues, identity theft, and the role of trust in digital marketing.
Prerequisites: BUIS 200 Introduction to Business Systems or any CSCI course; and MRKT 181 Marketing Principles.

## MRKT 310 Marketing Research

A coverage of the fundamentals of the market research process and how marketing research is used to solve marketing problems. Topics include research design, data collection and analysis techniques, and interpretation and implementation of research findings.
Prerequisite: STAT 107 Business Statistics or STAT 117 Introduction to Statistics; MRKT 181
Marketing Principles; or permission of the instructor.

## MRKT 313 Advertising and Promotions

An examination of advertising and promotion principles from an integrated marketing communications perspective. Topics include consumer and market analysis, creative strategy, media selection, promotional budgeting, campaign evaluation, and agency relations.
Prerequisite: MRKT 181 Marketing Principles.

## MRKT 318 International Marketing

An examination of the opportunities and challenges facing business organizations in international markets. Topics include the international marketing process, the importance of effective international marketing communication, and the formation and execution of international marketing strategies. Special emphasis is placed on cultural, social, legal, political, and organizational forces that influence international marketing operations.
Prerequisite: MRKT 181 Marketing Principles.

## MRKT 375 Sales

An examination of the importance of personal selling and distribution. The course focuses on recruiting, organizing, and motivating the sales force; forecasting; budgeting; selling; control; and cooperation with channel distribution members.
Prerequisites: MRKT 181 Marketing Principles.

## MRKT 410 Advanced Marketing Research

A study of marketing using advanced qualitative and quantitative research methods. Students apply their knowledge and skills learned in MRKT 310 Marketing Research. Students design, develop and deploy qualitative and quantitative survey instruments, code and tabulate results, conduct statistical analyses, analyze findings, and make recommendations based on their research. Research findings are analyzed using appropriate statistical techniques. Verbal presentation skills are emphasized and written reports are prepared using APA (American Psychological Association)-style format.
Prerequisite: MRKT 310 Marketing Research.

## MRKT 480 Strategic Marketing

An integrative examination of how to design, develop, and deliver an effective marketing strategy within the context of an organization's overall business strategy. Topics include developing a marketfocused culture, customer and competitor analysis, value delivery, pricing, relationship management, brand management, and marketing communication. Students strategically analyze a firm's strengths and weaknesses while assessing opportunities and threats in the external environment using Porter's Five Forces Model. Marketing strategy formulation, implementation and control, and assessment of the functional areas of marketing (product, pricing, distribution, and promotion) are included. Students are assessed on the integration of common professional components of business including ethics, accounting, finance, management, operations, and marketing.
Prerequisites: Senior standing; Completion of at least two (2) 300-level MRKT courses; or permission of the instructor.

## MRKT 490 Independent Study in Marketing

An investigation of a topic in Marketing selected by the student with supervision by a member of the Marketing Department. The selection of a topic is made by the student with written approval of the faculty supervisor. A final report and oral presentation are required. All proposals must be approved by the faculty supervisor and the Department Chair.
Prerequisites: Sophomore standing; MRKT 181 Marketing Principles; a 3.00 GPA overall and in department courses.

## MRKT 495 Internship in Marketing

A supervised practical experience in a public or private organization appropriate to the student's program of study. Before registering for the internship, the student must submit a job description of the internship and a proposal showing how the internship integrates with the student's academic program. The internship requires a written critical reflection of the experience and an evaluation of the student's performance from the on-site work supervisor. Students may earn up to four (4) coursecredits through MRKT 495 Internship in Marketing. Students may earn no more than two (2) course credits in any one semester and no more than two (2) course credits in a given internship in a single semester. Students may apply one (1) course credit toward a marketing elective. The internship is not intended to satisfy or substitute for any of the courses required for the major. A minimum of 150 onsite hours is required for each course credit.
Prerequisites: Sophomore standing; MRKT 181 Marketing Principles; students must be in good academic standing.

## MATHEMATICS COURSES

## MATH 105 Math for Modern Society (Gen. Ed. Domain II-A)

An immersion in quantitative problem-solving, as it relates to real-world scenarios, in order to facilitate making informed decisions. Topics related to numbers in the news, financial mathematics, mathematical modeling, and probability and statistics enable students to sharpen arithmetic and algebra skills. An emphasis is placed on critical reading, sound reasoning, and precise oral and written communication in various applied situations.
Prerequisite: Satisfactory mathematics placement.

## MATH 105R Math for Modern Society (Gen. Ed. Domain II-A)

An immersion in quantitative problem-solving, as it relates to real-world scenarios, in order to facilitate making informed decisions. Topics related to numbers in the news, financial mathematics, mathematical modeling, and probability and statistics enable students to sharpen arithmetic and algebra skills. An emphasis is placed on critical reading, sound reasoning, and precise oral and written communication in various applied situations. This course includes an additional a one-hour per week lecture recitation. Topics may vary by section at the discretion of the instructor with the goal of supporting students' readiness for, and success, in the lecture course.

## MATH 110 Mathematics for Elementary Educators I (Gen. Ed. Domain II-A)

An exploration of numbers, their representations, relationships, and uses; arithmetic; elementary set theory; basic logic; geometry; measurement; probability; and statistics. This course offers a collegelevel treatment of content areas of interest to prospective early childhood and elementary teachers. Problem solving and the communication of mathematical ideas, both verbally and algebraically, are woven throughout the course. Note: Students may not receive credit for both this course and MATH 113 Introduction to College Mathematics.
Prerequisite: Satisfactory mathematics placement. Education majors only.

## MATH 110R Mathematics for Elementary Educators I (Gen. Ed. Domain II-A)

An exploration of numbers, their representations, relationships, and uses; arithmetic; elementary set theory; basic logic; geometry; measurement; probability; and statistics. This course offers a collegelevel treatment of content areas of interest to prospective early childhood and elementary teachers. Problem solving and the communication of mathematical ideas, both verbally and algebraically, are woven throughout the course. This course includes an additional a one-hour per week lecture recitation. Topics may vary by section at the discretion of the instructor with the goal of supporting students' readiness for, and success, in the lecture course. Note: Students may not receive credit for both this course and MATH 113 Introduction to College Mathematics.
Prerequisite: Education majors only.

## MATH 120 Mathematics for Elementary Educators II (Gen. Ed. Domain II-A)

A continuation of MATH 110 Mathematics for Elementary Educators I, providing further exploration of numbers and arithmetic, geometry, measurement, probability, and statistics from the point of view of prospective early childhood and elementary school teachers. Problem solving and the communication of mathematical ideas, both verbally and algebraically, are strands that unite the course. Note: Open only to Education majors.
Prerequisite: MATH 110 Mathematics for Elementary Educators I.

## MATH 123 Introduction to Functions (Gen. Ed. Domain II-A)

An exploration of numerical, graphical, and symbolic approaches to function concepts with emphasis on real-world applications, modeling, and problem-solving skills. Topics include polynomial and rational functions, equations and inequalities, systems of linear equations, and the connection between functions and their graphs.
Prerequisite: Satisfactory mathematics placement.

## MATH 123R Introduction to Functions (Gen. Ed. Domain II-A)

An exploration of numerical, graphical, and symbolic approaches to algebraic concepts with emphasis on real-world applications, modeling, and problem-solving skills. Topics include polynomials, rational expressions, equations and inequalities, systems of linear equations, matrices, and the connection between functions and their graphs. This course includes an additional a onehour per week lecture recitation. Topics may vary by section at the discretion of the instructor with the goal of supporting students' readiness for, and success, in the lecture course.

## MATH 180 Precalculus (Gen. Ed. Domain II-A)

A thorough preparation in the skills and topics needed to study calculus. After a review of polynomial and rational functions and their graphs, topics include inverse functions, exponential and logarithmic functions, and trigonometric functions.
Prerequisite: Completion of MATH 123 Introduction to Functions with a minimum grade of C (2.00) or better, or a satisfactory score on the mathematics placement examination.

## MATH 206 Discrete Mathematics I

An introduction to mathematical rigor and reasoning. Topics include logic, sets, functions, combinatorics, sequences and summations, recursion, and mathematical induction, with an emphasis on methods of proof. Note: A student may not receive credit for both this course and MATH 292 Discrete Mathematics.
Prerequisite: MATH 180 Precalculus or a satisfactory score on the mathematics placement examination.

## MATH 217 Business Calculus (Gen. Ed. Domain II-A)

A survey of the mathematical skills required in upper-level business courses. Emphasis is placed on applications of mathematics discussed in a business context. Topics include functions, polynomial equations, linear models and regression, systems of linear equations and matrix equations, and differential calculus.
Prerequisites: ECON 101 Principles of Macroeconomics or ECON 102 Principles of Microeconomics; and STAT 107 Business Statistics.
MATH 219 Calculus I (Gen. Ed. Domain II-A)
A study of functions, limits, continuity, the derivative, rules of differentiation of algebraic, trigonometric, exponential and logarithmic functions, applications of differentiation, definite and indefinite integrals, and the Fundamental Theorem of Calculus.
Prerequisite: Completion of MATH 180 Precalculus with a minimum grade of C (2.00) or better, or a satisfactory score on the mathematics placement examination.

## MATH 220 Calculus II

A study of the applications of integration, first-order linear and separable differential equations, techniques of integration, improper integrals, sequences, series, and Taylor and Maclaurin Series. Prerequisite: Completion of MATH 219 Calculus I with a minimum grade of C (2.00) or better.

## MATH 221 Calculus III

A study of conic sections; vectors in two and three dimensions; dot and cross products and their applications to geometry; equations of lines and planes; quadratic surfaces; polar, cylindrical, and spherical coordinates; and functions of several variables, partial derivatives, differentials, directional derivatives, gradients, optimization problems, multiple integrals and their applications.
Prerequisite: MATH 220 Calculus II with a minimum grade of C (2.00) or higher.

## MATH 222 Differential Equations

A study of the methods for solving linear and elementary nonlinear differential equations with special emphasis on applications in the sciences. Topics covered include equations of the variable separable type; exact, homogeneous and Bernoulli equations; the method of substitution; approximation methods; linear equations; series techniques; Laplace transforms; systems of equations; and the Sturm-Liouville theory.
Prerequisites: MATH 220 Calculus II and MATH 226 Linear Algebra and Applications.

## MATH 226 Linear Algebra and Applications

A study of vector spaces, subspaces, linear dependence, bases, dimension, linear mappings, linear equations, matrices, inner products and norms, determinants, quadratic forms, and the spectral theorem. Applications to various fields outside of mathematics are examined.
Prerequisites: MATH 206 Discrete Mathematics I and MATH 219 Calculus I.

## MATH 310 Number Theory

A study of the integers, including divisibility, prime numbers, and modular arithmetic. Topics include congruences, the Fundamental Theorem of Arithmetic, multiplicative functions, primitive roots, quadratic reciprocity, and classic number sets. Theory is explored using a computer algebra system. Prerequisites: Completion of MATH 206 Discrete Mathematics I with a minimum grade of C (2.00) or higher.

## MATH 317 Higher Geometry

A precise, rigorous examination of the axioms and concepts of various geometries. Euclidean, nonEuclidean, and transformational geometries are investigated, and proofs are emphasized throughout the course.
Prerequisites: Sophomore status and completion of MATH 206 Discrete Mathematics I with a minimum grade of $\mathrm{C}(2.00)$ or higher.

## MATH 322 History of Mathematics

An examination of the development of mathematical concepts through the years. The use of historical material in the classroom, the reading of original sources, and study of famous problems are emphasized. Topics include ancient Egyptian, Greek, and Islamic mathematics and, solutions to polynomial equations, up to the development of the calculus.
Prerequisite: MATH 219 Calculus I.

## MATH 340 Probability Theory

A study of general probability and random variables with univariate and multivariate probability distributions. Topics include axioms of probability, combinatorial and conditional probabilities, special distributions, and the Central Limit Theorem. Examples from scientific and business fields may be discussed. Upon course completion, students should be prepared for the Society of Actuaries (SOA) Preliminary Exam P (Probability).
Prerequisites: Completion of MATH 206 Discrete Mathematics I with a minimum grade of C (2.00) or higher and MATH 221 Calculus III (may be taken concurrently), or permission of the instructor.

## MATH 346 Complex Analysis

A survey of the foundations of calculus of a single complex variable. Topics include defining the complex plane, differential calculus of complex functions, elementary functions on the complex plane, the Cauchy-Riemann equations, contour integrals, the Cauchy Integral Formula, Liouville's Theorem, and the Fundamental Theorem of Algebra.
Corequisite: MATH 221 Calculus III.

## MATH 360 Combinatorics and Graph Theory

An introduction to the basic techniques and reasoning of combinatorial problem-solving. Topics from graph theory studied include the types of graphs, planarity, coloring theorems, and an introduction to Ramsey theory. Topics from enumerative combinatorics studied include counting principles, inclusion/exclusion, the pigeonhole principle, combinations, permutations, binomial identities, and generating functions.
Prerequisites: Completion of MATH 206 Discrete Mathematics I with a minimum grade of C (2.00) and MATH 220 Calculus II or permission of instructor.

## MATH 390 Special Topics in Mathematics

An in-depth examination of topics in mathematics at a level beyond that of introductory courses. Topics vary depending on the interests of the instructor and may be interdisciplinary. This course may be taken twice, provided a different special topic is offered.
Prerequisites: Completion of MATH 206 Discrete Mathematics I with a minimum grade of C (2.00) or higher and MATH 220 Calculus II, or permission of the instructor. Additional prerequisites may be required dependent upon topic.

## MATH 419 Abstract Algebra I

An introduction to algebraic structures including groups, rings, and fields, as well as morphisms and sub-structures. Fundamental number theoretic topics are included to establish connections and provide examples in the context of abstract algebra.
Prerequisite: Completion of MATH 226 Linear Algebra with a minimum grade of C (2.00) or higher.

## MATH 427 Real Analysis

An in-depth study of set theory, relations and functions, properties of the real number system, topology of the real line, introduction to metric spaces, limits of sequences and functions, continuous functions, differentiation, and the Riemann-Stieltjes integral.
Prerequisite: Completion of MATH 206 Discrete Mathematics I with a minimum grade of C (2.00) or higher and MATH 221 Calculus III.

## MATH 439 Abstract Algebra II

A further study of the essential topics of abstract algebra including: normal subgroups, ideals, polynomial rings, and Galois Theory. Additional topics are addressed to establish connections to applications in modern mathematics.
Prerequisite: MATH 419 Abstract Algebra I.

## MATH 490 Independent Study in Mathematics

Student research on a topic or topics in higher mathematics or computer science. Suggested areas include applied algebra, numerical analysis, and mathematical physics. The student should make arrangements with the faculty member who is to direct the work one semester in advance of the work. Prerequisite: Approval of Department Chair.

## MATH 495 Internship in Mathematics

The student is encouraged (and assisted to whatever extent possible) by the Mathematics Department to seek employment during summers or part time during the school year, involving non-trivial applications of mathematics. In this manner the student can earn up to three (3) course credits, the amount of credit being decided by the student's advisor and the department chair.
Prerequisite: Approval of Department Chair.

## MUSEUM STUDIES COURSES

## MUSE 110 Introduction to Museum Studies (Gen. Ed. Domain III-B)

A broad interdisciplinary examination of museums to explore how contemporary societies collect, preserve, display, and interpret culture. Students learn about the origins and objectives of different types of museums (e.g. fine art, history, science) through discussions with museum professionals. As part of the course, students visit museums in Framingham as well as other local institutions. Note: Students cannot receive credit for both this course and INTD 371 Museum Studies.

## MUSE 495 Internship in Museum Studies

A supervised experience in a museum, historical site, or other field study situation, which complements the student's course work in Museum Studies. Students are expected to work a minimum of 150 hours for course-credit. The internship program is offered through the cooperation of participating institutions, which provide professional guidance for the interns. Any student who wishes to participate in an internship must complete the application in consultation with the chair of either the Art and Music, Fashion Design and Retailing, or History Department, no later than the middle of the semester prior to beginning of the internship. Open to museum studies minors only. Prerequisites: Junior standing; MUSE 110 Introduction to Museum Studies; cumulative GPA of 2.50 or higher; permission of the department chair of the supervising professor.

## MUSIC COURSES

## MUSC 121 Music Appreciation (Gen. Ed. Domain I-B)

An introduction to music in the Western classical tradition from the Medieval period to the present day. Through an examination of major composers and works within their social and cultural contexts, students develop critical listening skills and gain a more thorough appreciation and understanding of this musical tradition.

## MUSC 136 Pathways to Musical Understanding (Gen. Ed. Domain I-B)

An exploration to understand music as an intellectual and creative activity grounded in human experience and emotion. Musics examined span a range of geographical, historical, and stylistic sources including world music, Western classical music, jazz, folk, and popular. The course uses a variety of perspectives or "pathways" to guide students to broad-based musical insights and awareness. These perspectives include: celebration and commemoration; politics and protest; war and peace; religion and ritual; death and mourning; and composition and improvisation.

## MUSC 141 American Musics (Gen. Ed. Domain I-B)

An introductory study of the diverse musical traditions that form the American heritage. Examining performance in its cultural setting, this course surveys music of the colonial period, Anglo and African-American folk musics, popular forms of the 19 th and early 20 th centuries, jazz, blues, rock music, indigenous and immigrant styles, and composers in the Western classical tradition.

MUSC 151 The History and Literature of Jazz (Gen. Ed. Domain III-A)
An introduction to the vast expanses of the jazz idiom, which investigates the historical traditions of jazz as a cultural and political force specifically within the United States during the late nineteenth century and throughout the twentieth century. The course examines the roots of jazz and its influence upon other genres and performance practices of oral and written music.

## MUSC 171 World Music Cultures (Gen. Ed. Domain III-B)

An introductory survey of selected non-Western musical traditions, which may include those of Asia, Oceania, Africa, Latin America, and Native America. Topics include song and dance styles, musical instruments, social context and function of performance genres, musical structure, and aesthetic principles. A primary theme is how the "traditional" musics maintain their vitality in new contexts and alongside contemporary styles and genres.

## MUSC 201 Theory I: Materials of Music (Gen. Ed. Domain II-A)

An introduction to the basic language and practices of Western music theory. The course provides a theoretical model for understanding music of the written tradition based on logical reasoning and deduction as methods for understanding and manipulating geometric and spatial patterns of pitch and duration that are foundational to analysis of musical compositions.

## MUSC 220 Women in Music (Gen. Ed. Domain III-A)

A survey of the musical achievements of women and the historical contexts that defined their artistic and social roles as composers, performers, and arts patrons. The course covers major figures from the Western Classical tradition and those from the classic blues and jazz periods. Goals include the development of listening skills, an understanding of basic musical concepts (including form and genre), and a consideration of the broader historical relationship between women's roles in music and society.

## MUSC 222 Music Technology and Production I (Gen. Ed. Domain I-A)

An introduction to the hardware, software, and techniques involved with composing, editing and producing digital music. The primary goal is to gain a working facility and knowledge of fundamental technologies found within a modern music production environment such as digital audio workstation (DAW) software, file management, mixing techniques, sound editing, sequencing, sampling, sound design, and synthesis. Foremost is the creative application of these skills that result in original pieces of music, sound design environments, and emulated modular synthesizer design.

## MUSC 248 History of Rock Music to the 1970s (Gen. Ed. Domain I-B)

An introduction to the history and evolution of rock styles from their roots in the blues, country, and early popular genres to the 1970s. The course includes stylistic analysis and critical listening, as well as discussion of the technological, social, and political issues that play a role in rock music history. NOTE: Students cannot receive credit for both this course and MUSC 235 History of Rock Music.

## MUSC 273 Beats, Bars, and Breaks: Hip-Hop Music in the United States

(Gen. Ed. Domain III-B)
An examination of the history of rock, primarily as it unfolded in the United States, from the 1970s to the present with an emphasis both on cultural context and on the music itself. Students also explore how developments in the music business and in technology helped shape not only the ways in which musical styles change, but also how fans and critics interact with these evolving styles. NOTE: Students cannot receive credit for both this course and MUSC 235 History of Rock Music.
MUSC 275 History of Rock Music from the 1970s to Today (Gen. Ed. Domain I-B)
An examination of the history of rock, primarily as it unfolded in the United States, from the 1970s to the present with an emphasis both on cultural context and on the music itself. Students also explore how developments in the music business and in technology helped shape not only the ways in which musical styles change, but also how fans and critics interact with these evolving styles. NOTE: Students cannot receive credit for both this course and MUSC 235 History of Rock Music.

## MUSC 280 Performative Exploration of Music (Gen. Ed. Domain I-A)

An exploration of musical practices of various styles through rehearsal and performance. Through collaborative rehearsals and individual preparation, students learn the basics of musicianship (ear training and dictation) and improvisation techniques while gaining a nascent understanding of various styles including, but not limited to, jazz, pop, rock, country, R\&B, and hip hop. Although proficiency in an instrument is not required, some experience with creating music at any level is highly recommended. This experience includes, but is not limited to, reading notated music, playing/singing "by ear," rapping, and/or creating/producing electronic beats. The demonstration of acquired skills and knowledge is presented in a minimum of two showcase performances during the semester. Students are responsible to bring their own instrument(s).

## MUSC 490 Independent Study in Music

A Music minor with demonstrated ability may pursue a project or subject area of their own interest, under the guidance of a member of the Art \& Music Department faculty. The student must submit a written proposal to the faculty member who has agreed to be the advisor. A student may take more than one independent study. Limited to juniors and seniors.

## NEUROSCIENCE COURSES

## NEUR 225 Biopsychology

An overview of the biological foundations of behavior and mental processes. Topics covered include the biological underpinnings of various domains in psychology such as emotion, motivation, perception, cognitive function, psychopharmacology, and hormone effects on the brain and behavior. No Laboratory.
Prerequisite: PSYC 101 General Psychology and one of the following biology courses: BIOL 109/109L Introduction to Biological Science with Lab, BIOL 130/130L Principles of Biology with Lab, BIOL 135/135L Foundations of Biological Science with Lab, or BIOL 142/142L Introduction to Human Biology with Lab; or permission of instructor.

## NEUR 306 Neurophysiology

An advanced examination of how brain structure and function change when the central nervous system interacts with other physiological systems in the body. General brain anatomy is examined by using empirical research studies and historically significant human case studies. Cellular changes involved in learning and memory and the neuroendocrine system are used as examples of systemic interactions.
Prerequisites: Either BIOL 235/235L Principles of Human Physiology with Lab or BIOL 241/241L Human Anatomy and Physiology I with Lab; and either NEUR 225 Biopsychology or PSYC 101 General Psychology; or permission of instructor.

## NEUR 348 Cognitive Neuropsychology

An advanced study of human cognitive processes and the brain imaging techniques used to measure them. Topics include hemispheric specialization, consciousness, object recognition, working memory, attention, and brain damage/dysfunction. Clinical neuropsychology and comparative neuropsychology are introduced. The course emphasizes the relationship between theory and experimental research.
Prerequisites: NEUR 225 Biopsychology; or PSYC 101 General Psychology and BIOL 325 Neurobiology with Lab; or BIOL 142 Introduction to Human Biology with Lab and either PSYC 245 Health Psychology or PSYC 280 Sensation and Perception; or permission of instructor.

## NEUR 380 Neuropharmacology

An advanced investigation into the cellular and molecular mechanisms of exogenous compounds and the physiological and behavioral responses of the body. Use of substances to treat mental disorders is emphasized. Compounds examined may include alcohol, tobacco, illicit drugs, prescription pharmaceuticals, over-the-counter medications and naturopathic treatments.
Prerequisites: NEUR 225 Biopsychology or PSYC 101 General Psychology; and any biology laboratory course; or permission of instructor.

## NEUR 450 Seminar in Neuroscience

An advanced course where students investigate current research topics in neuroscience through reading and analysis of primary research articles. Students also investigate and report upon their own research project to the class. Note: This course is designed for Biology and Psychology majors with an interest in Neuroscience.
Prerequisite: One (1) of the following courses: NEUR 225 Biopsychology, BIOL 344/344L Animal Physiological Ecology with Lab, BIOL 235/235L Principles of Human Physiology with Lab, BIOL 242/242L Human Anatomy and Physiology II with Lab; or permission of instructor.

## NEUR 490 Independent Study in Neuroscience

An opportunity for the advanced student to conduct an in-depth investigation of a special topic in Neuroscience relevant to the student's special interests. The ability to work independently with a high degree of motivation and self-discipline is expected. The student is responsible for arranging with a supervising professor the topics or material to be covered, the method of study and the method of evaluation. Note: Any data gathered for this course cannot be used for the research methods courses in either Biology or Psychology.
Prerequisites: Declared Neuroscience minor; junior or senior standing; completion of at least three (3) core courses in the Neuroscience minor; completion of at least two (2) semesters at Framingham State University; minimum overall GPA of 2.50; and permission of the department chair of the supervising professor.

## NEUR 495 Internship in Neuroscience

A supervised field placement that complements prior Neuroscience course work. The internship is offered in cooperation with a participating business, institution, agency, school, hospital, or research facility. A minimum of 8 hours per week ( 120 hours total) must be completed in the placement setting and must be completed within one (1) semester. The field work is supported by regular meetings on campus with the supervising professor. Any student interested in an internship must consult with the chair of either the Biology Department or Psychology and Philosophy Department in the middle of the semester preceding the semester of the desired internship. Students are responsible for securing a placement and presenting it to the department chair and supervising professor for approval. A written plan for the internship must be submitted by the student to the department chair prior to approval. Note: Data gathered for this course may not be used in any research methods courses in either Biology or Psychology.
Prerequisites: Declared Neuroscience minor; junior or senior standing; completion of at least three (3) core courses in the Neuroscience minor, completion of at least two (2) semesters at Framingham State University, minimum overall GPA of 2.50 ; and permission of the department chair of the supervising professor.

## NURSING COURSES

## NURS 310 Professional Nursing Perspectives

An overview of the Nursing Department's philosophy, conceptual framework, and objectives. Philosophical, historical, ethical, economic, and legal aspects of nursing practice are examined. Contemporary and future goals of the nursing profession in relation to education, practice and research, as well as the health care delivery system are investigated. In the practice learning experience component students explore professional nursing activities and the course concepts.
Prerequisite: Must be an Registered Nurse (R.N.)

## NURS 325 Nursing Informatics

A Web-enhanced course that introduces the student to the role of nursing informatics in identifying, collecting, processing, and managing information that uniquely impacts nursing practice. The practice learning experience component emphasizes the development of proficiency in the use of the computer as a critical thinking and decision-making tool.
Prerequisite: Nursing majors only.

## NURS 330 Primary Prevention in the Community

An exploration of community values, beliefs, standards, and practices as they relate to health. The concept of primary prevention is applied through the nursing activities of education, motivation, advocacy, and assistance. A community-based practice learning experience component with a focus on prevention is included.
Prerequisite: Nursing majors only.

## NURS 420 Nursing Theory

An examination of nursing theory, the scientific process of theory development, and theory evaluation. Selected nursing theories that are relevant to current nursing practice are analyzed and applied in the practice learning experience component.
Prerequisites: NURS 310 Professional Nursing Perspectives.

## NURS 430 Secondary Prevention

An overview of the utilization of functional health pattern nursing assessment to identify health at the secondary level of prevention in order to arrest the development of illness and promote wellness. The practice learning experience component enables the student to deliver nursing care through the use of the nursing process.
Prerequisites: NURS 310 Professional Nursing Perspectives and NURS 330 Primary Prevention in the Community.

## NURS 440 Introduction to Nursing Research

An introduction to the research process and the evaluation of nursing research. The practice learning experience activities are organized around the identification and exploration of specific nursing problems.
Prerequisites: NURS 325 Nursing Informatics.

## NURS 460 Nursing Leadership

A presentation of theories of leadership and management and their applications to nursing. Central concepts included are: communication theory, teaching-learning theory, the nurse's role in delegation of responsibility, evaluation of nursing care, and effecting change. The practice learning experience component enables the student to apply the principles of nursing practice.
Prerequisites: NURS 325 Nursing Informatics.

## NURS 470 Tertiary Prevention

An examination of the role of health-related behaviors in chronic illness or disability. Aspects of habilitation and rehabilitation are explored throughout the person's life. The practice learning experience component enables the student to apply nursing theory to the care of individuals and families in order to minimize the negative consequences of illness or disability.
Prerequisites: NURS 430 Secondary Prevention.

## NURS 490 Independent Study in Nursing

An investigation of a topic in Nursing selected by the student with supervision of a member of the Nursing Department. The selection of a topic is made by the student with written approval of the faculty supervisor. A final report and oral presentation are required. All proposals must be approved by the faculty supervisor and the Department Chair.
Prerequisites: A 3.00 GPA overall and in the major.

## NUTRITION MANAGEMENT COURSES

## NUTM 111 Nutrition in School Nutrition Programs

An integration of nutrition science with its application to diet and health. Emphasis is placed on nutrient and energy requirements for individuals throughout the life span with a special focus on school nutrition programs. Topics include macro- and micronutrients; digestion, absorption, and metabolism; body composition and weight management; vegetarianism; allergies and intolerances; and chronic diseases. Students assess their own diets using nutrient analysis software. NOTE: Students cannot receive credit for both this course and NUTR 110 Fundamentals of Nutrition Science. This course is not open to students in the Food and Nutrition Department.
Prerequisite: Enrolled in the Certificate in Excellence in School Nutrition Program or permission of the instructor.

## NUTM 222 Professional Development and Communication in School Nutrition

A review of the knowledge and skills necessary for school nutrition professionals to establish a communication infrastructure to promote their school nutrition programs to a variety of audiences in the school community. Students advance their presentation skills, develop competencies in adult learning theory and training, and develop expertise in written communication for a variety of different audiences in school nutrition programs. NOTE: This course is not open to students in the Food and Nutrition Department.
Prerequisite: Enrolled in the Certificate in Excellence in School Nutrition Program or permission of the instructor.

## NUTM 333 Foodservice Systems in School Nutrition Programs

A study of current trends and practices in school foodservice. Topics include concepts of menu planning, procurement, production, service, marketing, financial analysis and cost control, and food safety. Students work on case studies and projects particular to the school foodservice environment. Note: Students cannot receive credit for both this course and NUTR 384 Foodservice Systems. This course is not open to students in the Food and Nutrition Department.
Prerequisite: Enrolled in the Certificate in Excellence in School Nutrition Program or permission of the instructor.

## NUTM 400 Technology Applications in School Nutrition

A study of technology designed to enhance the efficiency and accuracy of practice in school nutrition programs. Students investigate the development, application, and evaluation of technologies related to school nutrition programs. Note: Students cannot receive credit for both this course and NUTR 479 Technology Applications in Nutrition. This course is not open to students in the Food and Nutrition Department.
Prerequisite: Enrolled in the Certificate in Excellence in School Nutrition Program or permission of the instructor.

## NUTM 444 Management in School Nutrition Programs

An investigation of the principles of management and organizational behavior needed for leaders of school nutrition programs. Topics include management theory, managing human resources, marketing, communication, leadership theory, financial data analysis, productivity, governmental regulations, and quality assurance programs. Note: Students cannot receive credit for both this course and NUTR 482 Management in Food and Nutrition Services. This course is not open to students in the Food and Nutrition Department.
Prerequisite: Enrolled in the Certificate in Excellence in School Nutrition Program or permission of the instructor.

## PHILOSOPHY COURSES

## PHIL 101 Invitation to Philosophy (Gen. Ed. Domain I-B)

A critical inquiry into life, death, and the meaning of human existence. Issues such as the nature of reality, knowledge, the problem of truth, the existence of God, free will, and justice are examined from varying perspectives and sources: Western, global, classical, or modern.

## PHIL 102 Introduction to Ethics: Why Be Moral? (Gen. Ed. Domains III-C)

An exploration of moral reasoning, and the claims of morality on self and society through an assessment of ethical theories, both classical and modern. The course considers topics such as human sexuality and the preservation of integrity in human decision making. The dynamics of self and society and subjects of social responsibility are pursued by focusing attention on issues such as freedom and justice; rights and duty; race, gender, and class; and the meaning of work.

## PHIL 103 Introduction to Logic (Gen. Ed. Domain II-A)

A study of fundamental topics in logic: classical logic, truth functional logic, inductive reasoning, and informal fallacies. The study of logic is presented as a fascinating mental exercise and as the acquisition of skills essential to clear and reasonable thought and discourse.
PHIL 105 Introduction to Political and Social Philosophy (Gen. Ed. Domains III-B)
A study of conflicting philosophical views about politics and social institutions. Salient historical and contemporary theories including those of gender, race, and class are analyzed and discussed. Attention is given to the philosophical presuppositions directing socio-political institutions.

PHIL 118 Introduction to Philosophy of Science (Gen. Ed. Domain I-B)
An introduction to commonly discussed philosophical issues about science, such as the matter in which scientific theories are justified. The course makes reference to specific episodes in the history of science, such as the adoption of the Copernican view that the earth travels around the sun, and the rejection of some ideas of classical physics in favor of modern relativity theory and quantum mechanics.

## PHIL 131 Critical Reasoning (Gen. Ed. Domain II-A)

A consideration of the methods and criteria of natural, informal reasoning. The primary concern is with the techniques of reasoning embedded in language. Consideration is given to methods of analysis and criteria of good argument.

## PHIL 222 Bioethics (Gen. Ed. Domain III-C)

An examination of moral issues in modern biology. Major theories of ethics, as well as biological aspects of development, genetics, genetic engineering, and the environment, are investigated. Themes such as brain death and euthanasia, abortion, scarcity of medical resources, reproductive control, patient confidentiality, and environmental issues are explored.

## PHIL 234 Environmental Ethics (Gen. Ed. Domain III-C)

A critical inquiry into the human relationship with nature. The course emphasizes the historical and ethical changes in the philosophy of nature and the natural world. Ways in which attitudes and values regarding nature are grounded in cultural, religious, and societal beliefs are also disclosed.

## PHIL 490 Independent Study in Philosophy

Topic(s) of philosophical interest to be chosen by the student.
Prerequisite: Two introductory courses or one introductory and one intermediate course in philosophy.

## PHYSICAL SCIENCE COURSES

## PHSC 109 Introduction to Physical Science (Gen. Ed. Domain II-B, Lab)

An introduction to the fundamental behavior of matter and energy. Topics include the nature of scientific investigation, properties of matter, motion, energy conservation, heat, wave motion, magnetism and static electricity, nuclear fission and fusion, and the relationships among the different areas of physical science. This course is intended for Elementary Coordinate Education majors and includes a weekly two-hour laboratory component. Note: Students will not receive credit for this course after having taken PHYS 201 Introductory Physics or PHYS 211 Principles of Physics I.
Prerequisites: Satisfactory score on the mathematics placement examination and status as an Education major.

## PHYSICS COURSES

## PHYS 111/111L Physics, Nature, and Society with Lab (Gen. Ed. Domain II-B, Lab)

(1.25 Course-credits)

A study of conceptual physics, with an emphasis on the discovery of the hidden patterns in nature that govern everyday phenomena, from motion and forces to energy and conservation laws. The complex relationship between science, technology, and society is explored, including discussions of the relationship between humans and nature, and the use and abuse of science in society, with particular emphasis on environmental problems such as global warming. NOTE: Students will not receive credit for this course after having taken PHYS 201 Introductory Physics or PHYS 211 Principles of Physics I.
Corequisite: PHYS 111L Physics, Nature, and Society Lab.
Prerequisite: A satisfactory score on the mathematics placement examination.


#### Abstract

PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab (Gen. Ed. Domain II-B, Lab) (1.25 Course-credits)

An introduction to the aspects of physics relevant to the earth and life sciences, surveyed at a noncalculus level. This course prepares students to understand Earth, environmental, and life processes, from earthquakes and climate change to electrical conduction in the nervous system and biological systems. Topics include motion and forces; energy and its conservation; fluids; oscillations and waves; electrostatic force and currents; simple and complex systems; and radioactivity. Laboratory ( 3 hours). Note: This is a one-semester course and may not be acceptable to some professional or graduate programs. Corequisite: PHYS 201L Physics with Applications to Earth and Life Systems Laboratory. Prerequisite: MATH 180 Precalculus.


## PHYS 211/211L Principles of Physics I with Lab (Gen. Ed. Domain II-B, Lab)

(1.25 Course-credits)

The study of motion, Newton's Laws, work and energy, momentum, gravitation, and the rotation of rigid bodies. Designed for students majoring in the sciences, mathematics, and pre-engineering. Students are required to enroll in the corresponding weekly laboratory (3 hours).
Corequisite PHYS 211L Principles of Physics I Lab.
Prerequisite: MATH 219 Calculus I.
PHYS 212/212L Principles of Physics II with Lab
(1.25 Course-credits)

A continuation of PHYS 211 Principles of Physics I, involving the study of wave motion, sound, electricity and magnetism, direct current (DC) circuits, and electromagnetic waves. Designed for students majoring in the sciences, mathematics, and pre-engineering. Students are required to enroll in the corresponding weekly laboratory ( 3 hours).
Corequisite PHYS 212L Principles of Physics II Lab.
Prerequisite: PHYS 211 Principles of Physics I with Lab.

## PHYS 490 Independent Study in Physics

An opportunity to continue to study a topic in greater depth or to explore topics or problems in the earth sciences that are new to the student. Admission to this course is open only to juniors and seniors who are Physics minors and who have an overall QPA of 2.70. Admission must be approved by the supervising faculty member and the department chair.

## POLITICAL SCIENCE COURSES

## Lower Level

## POSC 110 Introduction to American Politics (Gen. Ed. Domain III-B)

An introduction to American governmental institutions and the political process. Among the topics included are the political culture and socialization, political participation, the media, social movements and minority politics, and interest groups and political parties. This course fulfills the requirement to study the United States and Massachusetts constitutions.

## POSC 120 Introduction to World Politics (Gen. Ed. Domain III-C)

An introduction to the field of international relations and the debates and dilemmas surrounding our global system as we enter the twenty-first century. Concentration is on the importance of the nationstate in global issues. Focus is also on emerging actors and alternative perspectives. Issues such as nationalism, globalization, power structure, economic development, and sustainability are examined.

## Intermediate Level

## POSC 200 Model United Nations (Gen. Ed. Domain III-B)

An introduction to the activities of the United Nations, as well as an understanding of the modalities of international diplomacy. It focuses on current events, pressing international issues, the basics of international law and some of the protocol and procedures of diplomacy. All of this assists students in preparing for their roles as distinguished diplomats at various regional or national Model UN conferences. Travel to compete at United Nations in New York City is required. Note: This course is offered in fall semesters only.

POSC 206 Constitutional Law: Powers of the Government (Gen. Ed. Domain III-A)
A study of the role of judicial supremacy, judicial restraint, and judicial activism concerning the powers of the government in the American political system and the processes by which they have evolved in the United States. The course is designed to give students an understanding of the role of constitutional law in the American polity, the interrelationships between law, politics, and economics, and the role of courts, especially the United States Supreme Court, in the process.

## POSC 209 The American Supreme Court (Gen. Ed. Domain III-A)

An introduction to the historical development of the United States Supreme Court as a legal institution and a policymaker, as well as the role the Supreme Court has played in the American political system. Topics covered in the course include: access to the Court; the nature of Supreme Court decision-making; judicial selection and nomination; and the relationship between the Supreme Court and the executive and legislative branches of government.

POSC 211 Political Theory: Justice, Law, and Order (Gen. Ed. Domain III-A)
An historical approach to the study of the ideas of justice, law, and order as they evolved in Western tradition from Hammurabi's code and Plato's Republic in ancient times to such twentieth- century analyses as John Rawls' A Theory of Justice. This course integrates information from the disciplines of politics, history, and philosophy. This course fulfills the requirement to study the United States and Massachusetts constitutions.

## POSC 213 Political Parties and Interest Groups (Gen. Ed. Domain III-B)

An analysis of the characteristics, roles, and status of American political parties and interest groups. Attention is focused on the strengths and weaknesses of the party system, alternative forms of political organization, and society at the present. Note: Students may not receive credit for both this course and POSC 326 Political Parties and Interest Groups.

## POSC 216 Film and Politics (Gen. Ed. Domain III-C)

An examination of the relationship between film and American politics. This course examines how film depicts and influences American political culture, values, and institutions with emphasis on the relationship between film and the politics of gender, class, and race. Students are required to review and analyze film texts in relationship to the scope of the course.
Prerequisite: ENWR 110 Composition II.

## POSC 218 The American Presidency and Congress (Gen. Ed. Domain III-B)

An exploration of the constitutional arrangement of power between the executive and legislative branches of the American national government. The course examines concepts of representation and the democratic process, including legislation, presidential power and political influence over decision making. The course also provides an overview of the often-combative relationship between both branches of government as well as how they interact with the American public, the private sector, and civil society.

## POSC 220 The Politics of Globalization (Gen. Ed. Domain III-C)

An introduction to the political, economic and social impacts that global interdependence has on the structure and function of nation-state, international organizations, and international society. The course explores how political interdependence (supranational organizations, global governance) and economic interdependence (global flow of goods, services, capital and labor) affect the international dynamics of political values, culture, and ideas.

## POSC 223 Bureaucratic Politics and Power (Gen. Ed. Domain III-A)

An introduction into bureaucratic organizations servicing the public sector and how these organizations came to exist. The course provides an analysis of the politics, power, and behavior of governmental bureaucracies and their impact on individuals and society. Topics include the historical growth of bureaucratic authority and power, organizational behavior, administrative leadership, decision-making, the politics and administration of program management, and the concern for administrative responsibility in a democratic society.

## POSC 229 Public Policy Analysis (Gen. Ed. Domain III-B)

An analysis of the policy process emphasizing the response of officials to problems, available policy alternatives, the way officials choose and implement programs and the effect of these programs. The aim of this course is to provide policy researchers with a set of conceptual frameworks for analyzing the political environment of public policy and policy research, and to practice forming effective strategies for policy analysis, program evaluation, policy design, and advocacy. The concepts, skills, and analytical tools students learn in the course rest upon a foundation of economic principles, institutional analysis and, to a lesser extent, political and social psychology. Students identify patterns of behavior and outcomes, ways of thinking about those patterns and outcomes, and methods of analysis that facilitate understanding and prediction, and, ultimately, the shaping of strategies to improve the success of policy researchers in their professional life. A substantive topic is used to illustrate the basic concepts and principles of the public policy process.

## POSC 246 Comparative Politics (Gen. Ed. Domain III-C)

A systematic study and comparison of the world's political systems, political institutions, and political culture and practices. The course introduces students to the major theories and concepts in comparative politics, as well as the basic tools of comparative analysis. The course explores competing theoretical approaches (modernization, rational choice, institutionalist and historycentered) in the areas of economic development, democratization, and political order. Topics include debates about the role of political institutions, state-building, and civil society in shaping political outcomes. These theoretical debates are examined through an analysis of cases around the world, including in Europe, South America, Asia, and Africa. Note: Students may not receive credit for both this course and POSC 320 Comparative Political Systems.

## POSC 248 The Global Rise of Populism

An introduction to populism in theory and practice. The course includes an overview of the following themes: the conceptual debate on populism; contemporary populist movements around the world; the characteristics of populist leaders and movements; theories of populist mobilization; the ambivalent relationship between populism and nationalism; the threat populism poses to democracy through the prism of wealth, inequality, and power; and national and international responses to the rise of populist forces.

## POSC 250 American Legal Systems (Gen. Ed. Domain III-B)

A study of the origins and essentials of the common law, statutes, constitutions, and court decisions in the United States. Emphasis is on legal reasoning and case analysis to promote legal problemsolving skills. Topics include criminal law and procedures, property law, contract law, and the law of torts. This course fulfills the requirements to study the United States and Massachusetts constitutions.

## POSC 269 Building Peace After Conflict (Gen. Ed. Domain III-C)

An examination of the theoretical and practical issues surrounding peace-building and, by extension, conflict resolution within contemporary conflicts. The course explores some of the current thinking and practice in the fields of conflict resolution and peace-building and addresses questions concerning the causes of conflict and the various strategies (both western and non-western) used to building peace in war-torn countries.
Prerequisite: POSC 120 Introduction to World Politics.

## POSC 270 Race, Politics, and the Law (Gen. Ed. Domain III-A)

A critical examination of race in the political and legal systems and how they have evolved historically. The objective is to gain a better understanding of how the legal and judicial systems have historically defined and employed racial categories and how this influences the present. Topics include racial servitude, segregation, equal protection, employment discrimination, and the Civil Rights Acts. Students consider how national, state, and local governments in the United States have shaped the lives of African Americans, Latino Americans and Asian Americans through the institutionalization of discrimination and the application of policies based on racist assumptions with the primary focus on how African Americans have used the political and legal systems to respond to prejudice, discrimination, and racism.

## POSC 272 Gender, Politics, and the Law (Gen. Ed. Domain III-A)

A critical examination of gender in the political and legal systems and how they have evolved historically. The objective is to gain a better understanding of how the legal and judicial systems have historically dealt with gender issues and how this influences the present. Throughout the course, students examine widely divergent perceptions of gender to provide a more informed assessment of the political world and their legal implications. Topics include gender and servitude, comparable worth, due process, equal protection, employment discrimination and Title IX.

## POSC 290 Topics in Political Science

An exploration of an area of political science offered on occasion at the discretion of the department. Determination of where the course fits in the academic program are made on a case-by-case basis.

## Advanced Level Courses

## POSC 300 Moot Court Symposium

A study of the role of judicial supremacy, judicial restraint, and judicial activism of the government in the American political system and the processes by which they have evolved in the United States. The course is designed to give students an understanding of the role of law in the American polity. Students prepare for participation in an undergraduate moot court competition. Discussion of court cases, brainstorming sessions regarding the development of arguments, sessions addressing public speaking and style, and practice sessions in which students present arguments, respond to questioning, and provide feedback to other students are included.
Prerequisites: ENWR 110 Composition II, math core, and Sophomore standing.

## POSC 305 Research Methods in Political Science

Designed to provide an overview of research methods in the discipline of political science. The course examines how political scientists investigate politics through both qualitative and quantitative methods. The course prepares students to design their own research projects, from the research question to the choice of methods and analytic strategies. From this overview, students may then explore or carry out a specific method of research in POSC 425 Seminar in Political Science.
Prerequisite: POSC 110 Introduction to American Politics and POSC 120 Introduction to World Politics or permission of instructor.

## POSC 308 International Law, Politics, and Society

An examination of the basic concepts and problems of international law and of the international legal system. The course covers the traditional major topics including the sources and subjects of international law, the jurisdiction of states, international law and the use of force. It focuses on current themes in international law such as the international law of human rights and international criminal law. The course also reviews and discusses a number of international law cases decided by national and international tribunals, treaties and other legal instruments of importance.
Prerequisites: General Education Domain IIIA, IIIB, or IIIC in progress or completed.

## POSC 313 American Political Thought

A focus on the nineteenth and early twentieth centuries in an attempt to understand American political thought in terms of "national mythology". Readings are primary sources.

## POSC 315 Judicial Politics and Policy

The roles of judges, lawyers, law enforcement officials, and litigants in the judicial system. The process used to make legal decisions and the effect of these decisions are examined. Finally, the courts' relations with other political institutions are analyzed.

## POSC 316 United States Constitutional Law: Civil Liberties

A study of the role of judicial supremacy, judicial restraint, and judicial activism concerning civil liberties in the American political system and the processes by which they have evolved.

## POSC 320 Comparative Political Systems

A systematic study and comparison of the world's political systems, political institutions, and political culture and practices. Topics include the state, the distribution and use of power, the struggle for democracy and the political economy. Note: Students may not receive credit for both this course and POSC 260 Comparative Political Systems.

## POSC 325 Public Management

A study of organizational management, administrative behavior, and public policy issues. The course is structured around the case method approach. Students' participation in the form of role playing and game simulation is highly emphasized.

## POSC 327 Elections and Campaign Strategy

An analysis of the changing nature of electoral politics resulting from such factors as the decline of parties, reforms, finance laws, the media, and voting behavior. The course focuses upon the techniques of campaign management to include strategy, fund raising, the media, polling, and the new technology. Students participate in a campaign and conduct an election survey.

## POSC 335 Public Personnel Management

A focus on organizational theory, organizational structure, staffing, job classification, unionism, collective bargaining, and personnel productivity and performance evaluation with respect to public sector management. Managerial tools related to recruitment, personnel supervision, organizational control, and leadership are emphasized. Case studies, role playing, and simulation are used to engage the student in the practical application of theories and practices of personnel management.

## POSC 342 Formation and Conduct of United States Foreign Policy

An analysis of the principal decision-making processes that affect, and have affected, the formulation and implementation of American foreign policy since World War I. Emphasis is on the major agencies and institutions responsible for the formulation and execution of American foreign policy decisions. A case study approach is followed.

## POSC 360 Threats to International Security in the 21st Century

An exploration of contemporary threats to international security from both a national and global perspective. Questions related to the nature of war, the dimensions of inter-state conflict, security threats from non-state actors, and the proliferation of weapons technology are examined. In addition, the expanding notions of human security are explored by considering civil violence, rape, poverty, gender subordination, and ecological destruction. Students participate in simulations designed to demonstrate the difficult decisions policymakers are confronted with in today's global security environment.
Prerequisites: Sophomore status and completion of General Education Domain III A, B, or C.

## POSC 363 The Politics of Race and Ethnicity in The United States

A study about the role of race and ethnicity in American politics and its contemporary significance to the nation's citizens, politicians, and governmental institutions. It focuses on the experiences and activities of African-Americans and Latinxs-America's two largest racial/ethnic minority groupsbut also explores some of the experiences of Asian-Americans, Native Americans, and others in the political realm. Large social science questions about race in America are addressed: How do the structures and processes of American political institutions affect the efforts of minority groups to secure political influence? How has the rise to power of minority politicians affected politics and policymaking? What is the nature of prejudice and how does it affect public opinion in the contemporary context? How does the media influence stereotypes and public discourse on various issues, such as affirmative action, welfare and crime?
Prerequisites: General Education Domain IIIA, IIIB, or IIIC in progress or completed.

## POSC 365 Latin American Politics

An examination of the nature of governance and politics in Latin America. This course provides an in-depth analysis of Central and South American countries, political histories, institutions, governance and culture. Topics may include ideology, revolution, class structure, distribution of wealth and power, and political and economic development.

## POSC 425 Seminar in Political Science

An advanced study of politics and political analysis under the direction of a member of the faculty. The course focuses on the development of political science as a discipline, the research tools needed for analyzing political information using relevant descriptive and inferential statistical tools, and the opportunity for students to conduct original research of their own design. Note: Open to Political Science majors only.
Prerequisites: Completion of nine (9) or more Political Science courses.

## POSC 450 Internship in the Judicial System

A supervised internship experience in the judicial system combined with an authorized field study assignment of a minimum of ten hours per week for the semester. Does not count toward the Politics major.
Prerequisite: POSC 250 American Legal Systems and permission of instructor. For details see Chair of the Political Science Department one semester prior to registration.

## POSC 490 Independent Study in Political Science

A politics major whose grade point average (GPA) in the major is no less than 3.00 and who has completed at least six courses in the Department of Political Science may apply to the Department for a course in Independent Study under the supervision of a member of the Department. This application should be made no later than the end of the third week of the preceding semester. The application must include a detailed proposal outlining either an extensive reading program or a research project.

## POSC 495 Internship in Political Science

A supervised work experience in politics or government combined with a field study assignment. Prerequisite: A 3.00 or higher GPA in the major plus completion of six courses in the Department. See Department Chair for details of specific requirements one semester prior to registration.

## PORTUGUESE COURSES

## PORT 101 Elementary Portuguese I (Gen. Ed. Domain I-C)

An integration of language and culture designed to provide beginners with basic functional language skills and an appreciation of Brazilian and Portuguese cultures. Note: Heritage speakers and students with previous experience in this language must take a placement test.

## PORT 102 Elementary Portuguese II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills and an appreciation of Brazilian and Portuguese cultures.
Prerequisite: Students must either complete PORT 101 or have the corresponding placement test score, or have prior approval of the instructor in order to enroll in this course.

## PORT 110 Elementary Portuguese for Spanish Speakers (Gen. Ed. Domain I-C)

An introduction to Portuguese intended for heritage speakers of Spanish or students who have taken advanced Spanish in previous studies. Along with fundamental communication skillsunderstanding, speaking, reading, and writing - the course focuses on those features of Portuguese that are most difficult for Spanish speakers: pronunciation, cognates, idioms, and grammatical structures. Students are introduced to the cultures of the Portuguese-speaking world through readings and other authentic materials, including films, music, and literature.

## PORT 201 Intermediate Portuguese I (Gen. Ed. Domain I-C)

A continuation of the study of Portuguese at the intermediate level. Students are trained to become independently functional in the Portuguese language and knowledgeable about Lusophone cultures and thought. Discussions are in Portuguese and based on cultural materials. The course also includes a comprehensive grammar review.
Prerequisites: PORT 102 Elementary Portuguese II or the equivalent placement test score or prior approval of instructor.

## PORT 225 Business Communication in Portuguese (Gen. Ed. Domain I-C)

A practical application of the Portuguese language for business purposes. Students practice written and oral communication skills for discourse in professional settings. Discussions are in Portuguese and address cultural aspects of business in Portuguese-speaking environments. This course may include topics such as unions, governments, and taxation systems. This course also includes a comprehensive grammar review.
Prerequisite: PORT 201 Intermediate Portuguese I or the equivalent placement test score; or permission of instructor.

## PORT 300 Portuguese in the Community

An in-depth exploration of the Luso-African-Brazilian experience in the United States (US). This course promotes community engagement as a vehicle for greater linguistic fluency and cultural understanding. Class work focuses on expanding students' oral and written proficiency through discussion and analysis of historical developments and migration patterns, ethnographic studies, literature and film by and about Luso-African-Brazilians in the United States. Students are placed with community organizations in the Framingham, Massachusetts area and volunteer for sixteen (16) hours over the semester in order to develop an overarching project.
Prerequisite: PORT 201 Intermediate Portuguese I or PORT 225 Business Communication in Portuguese, or the equivalent placement test score; or permission of instructor.

## PORT 490 Independent Study in Portuguese

An in-depth investigation of a topic in Portuguese literature, culture, linguistics, or pedagogy selected by the student under the guidance of a member of the World Languages Department. Regular meetings with the faculty advisor are arranged. A written report is required.
Prerequisites: Junior status and advanced knowledge of Portuguese.

## PORT 495 Internship in Portuguese

A supervised practical experience which complements the course work of the student in a field study setting. The experience requires individual consultations with the advisor and a research project. Admission to the internship is limited to juniors and seniors with at least a 2.50 GPA.
Prerequisites: One (1) course in PORT and permission of the instructor.

## PRE-HEALTH STUDIES COURSES

## HEAL 100 Orientation to Health-Related Professions (Non-credit)

An orientation for any student planning to apply for admission into a health-related graduate program. Students write and receive feedback on a personal statement and resume, develop interview skills and obtain letters of reference. Students also receive guidance regarding graduate exams (MCAT, DAT, GRE) and on finding relevant internships and health-related experiences. Students interested in the graduate programs focused on Medical, Dental, or Veterinary need to successfully complete this orientation in order to receive a letter of recommendation from the University's Health Professions Advisory Committee (HPAC). Note: Students should plan to enroll in this course at the start of their Junior year. This course is offered in fall semesters only.
Prerequisite: Permission of the instructor.

## PSYCHOLOGY COURSES

## PSYC 101 General Psychology (Gen. Ed. Domain III-B)

An introduction to the basic concepts of psychology including research methods in psychology, biological bases of behavior, learning, memory, development, social psychology and psychopathology. Students are exposed to principles, issues, theories and research findings in these areas.

## PSYC 200 Psychology of Development (Gen. Ed. Domain III-B)

An overview of major theories of development from the prenatal period through adolescence. Topics include brain research and the work of Piaget, Erikson, Kohlberg, Bronfenbrenner, and Vygotsky. Normative patterns in areas such as physical growth, cognition, morality, emotion, language acquisition, and socialization are addressed within the cultural context of the family. Interrelationships between cognitive developments and other developmental domains are stressed. Discussions and field applications encourage the critical evaluation of theoretical and normative information. Note: This course is only open to Elementary Education majors, Early Childhood Education majors, Child and Family Studies majors, or Secondary Education minors.

## PSYC 201 Child Development

An introduction to the study of the child from conception to the onset of adolescence. Basic concepts and theories of child development are studied, particularly those relevant to the psychological processes of perception, cognition, social interaction, and affective and moral development.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 212 Adolescent Psychology

An introduction to the study of the adolescent from the onset of puberty to the beginnings of adulthood. Topics include biological changes, identity development, the adolescent's relations with parents and peers, cognitive changes, moral development, achievement, and work issues. Special topics may include sexuality, drug abuse, delinquency, and psychopathology examined in the context of the adolescent's formation of his or her identity. Within each topic of development, current research findings regarding the specific issues of race, class, and gender as they apply to adolescent development are discussed.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 217 Introduction to Counseling

An introduction to the treatment of individuals experiencing psychological distress or specific mental health conditions. Topics include ethical issues, interviewing techniques, observational methods, communication skills applicable to therapeutic techniques, government regulations, and other topics relevant to effective functioning in the fields of clinical and counseling psychology. Different orientations to therapy including the psychodynamic, cognitive behavioral, and humanistic approaches are reviewed.
Prerequisite: PSYC 101 General Psychology.

## PSYC 222 Psychopathology

A survey of mental health conditions, such as mood, anxiety, eating, substance use, and psychotic disorders, included in the most recent version of the Diagnostic Statistical Manual (DSM). The current criteria used to categorize psychological disorders are examined. Problems in differentiating psychological disorder from typical human behavior are discussed. Major theoretical approaches to causation, such as the biological, psychodynamic, cognitive behavioral, and humanistic approaches are examined and compared.
Prerequisite: PSYC 101 General Psychology.

## PSYC 224 Social Psychology

An introduction to the factors and processes involved in people's understanding of themselves, others, and social interactions. Attention is given to research in such areas as social perception, gender, group interaction, attitude formation and change, aggression, social influence, interpersonal attraction, prejudice and discrimination, and pro-social behavior with particular emphasis given to differences relating to gender, race, and class.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 231 Adult Development

An introduction to factors and issues affecting the development of individuals from young adulthood through the senior years. Topics may include developmental changes in sensory and biological processes, cognition, personality, familial and peer relationships, vocational and recreational goals, and bodily and mental health
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 236 Psychology of Learning

An introduction to human learning from early conceptions to current psychological theories. Basic concepts and theories of learning are examined including classical conditioning, instrumental learning, operant conditioning, and social learning theory. Animal studies serve as the background for addressing current research in human behavior.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 245 Health Psychology

An introduction to the biological, psychological, and social factors related to the promotion of health and the prevention of illness. The body's nervous, endocrine, digestive, and circulatory systems are explored as well as how they can influence and be influenced by exercise, addiction, diet, stress, and social factors. The reciprocal interaction of the mind and body is emphasized. Note: Students cannot receive credit for both this course and PSYC 208 Health Psychology.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development, or sophomore status.

## PSYC 259 Cultural Psychology

An introduction to the importance of culture and ethnicity in explaining what were once considered universal psychological behaviors and processes. This course focuses on topics such as intercultural communication, research methods, cognition, gender, health, emotion, language, personality, abnormal psychology, and developmental processes across cultures and ethnicities. Note: Students cannot receive credit for both this course and PSYC 340 Cultural Psychology.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 263 Cognitive Psychology

An introduction to the experimental study of mental processes that underlie perception, attention, memory, reasoning, and problem solving. These processes are considered from a variety of perspectives that may include computational, neuroscientific, parallel processing, and developmental. Emphasis is placed on methodological issues, theoretical interpretations, and practical applications. Note: Students cannot receive credit for both this course and either PSYC 262 Learning, Memory and Cognition or PSYC 362 Cognitive Psychology.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 271 Applied Behavior Analysis

A consideration of various applications of learning theory and conditioning principles to social and individual problems. Techniques such as systematic desensitization, aversive conditioning, social modeling, token economies, and self-control procedures (e.g., biofeedback) are described. The application of these techniques is examined for a variety of problems, e.g., anxiety, psychotic and antisocial behaviors, phobias, alcoholism, smoking, and sexual dysfunction.
Prerequisite: PSYC 101 General Psychology.

## PSYC 280 Sensation and Perception

A study of how sensory organs transform physical energy in the environment into the psychological experience of perception. The neurophysiological processes involved in sensation and perception are highlighted. Topics include the structure and function of the visual cortex; color, motion, and depth perception; sound localization; and speech perception.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 286 Psychology of Women

An examination of the psychological development of women from birth through maturity. Topics may include biological bases of psychological sex differences; sex roles in work, family, and social relations; the historical context of stereotypes and attitudes toward women; development of women's self concept; and cross-cultural comparisons.
Prerequisite: PSYC 101 General Psychology or PSYC 200 Psychology of Development.

## PSYC 291 Research I: Descriptive and Correlational Methods

An introduction to psychology as a science with a focus on descriptive and predictive methodologies. Quantitative approaches - including observational, survey, and correlational designs - are covered. Qualitative approaches may also be introduced. Students develop skills in locating and understanding published research and formulating research questions. Students conduct empirical research individually and/or in groups. Students gain skills in conducting ethical research, producing codebooks, collecting data, evaluating variable properties, determining appropriate statistical tests, and using SPSS® statistical software (to perform descriptives, Chi Square tests, \& correlational analyses). Students prepare written American Psychological Association-style (APA) reports. Note: Students may not receive credit for both this course and PSYC 251 Psychology Research I: Methods. Prerequisites: Completion of PSYC 101 General Psychology (or PSYC 200 Psychology of Development) with a minimum grade of C-(1.70), completion of STAT 117 Introduction to Statistics with a minimum grade of C- (1.70), and sophomore status. Psychology majors only.

## PSYC 304 Psychology of Careers

An introduction to research on career development and the contemporary workforce. The course provides an overview of the major theories of career choice, such as trait-factor, developmental, and ecological approaches. The structure of vocational interests, values, personality, and abilities is also discussed. Finally, research on graduate school admissions and job search strategies is reviewed. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 305 Human Relations

Designed to provide students with an opportunity to study and to experience the small group situation in which the focus is on understanding the dynamics of interpersonal behavior and on developing communication skills. Topics include self-concept, person perception, verbal and non-verbal communication, and conflict resolution. Note: This is a writing intensive psychology course. Note: Students cannot receive credit for this course and PSYC 258 Human Relations.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 318 Educational Psychology

An advanced course on psychological research topics relevant to the classroom, such as achievement, motivation, self-esteem, creativity and intelligence, testing and assessment, and peer relationships. An examination of issues relevant to gender, race, and social class within educational settings are included from a psychological perspective. The psychological implications of school transitions, mainstreaming of special needs students, tracking, sports and extracurricular activities, and clinical disorders manifested in the classroom may be covered. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 324 Theories of Personality

An examination of the major classical and contemporary theories of personality. The course includes a critical analysis of how individual differences are assessed within each theoretical approach. The approaches covered include psychoanalytic, life span, humanistic, cognitive, and behavioral. Additional theoretical approaches may also be discussed. Situational and cultural implications for family, work, therapy, and education are considered. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 338 Industrial-Organizational Psychology

An introduction to psychological principles applied to the workplace and the field of industrialorganizational psychology. Possible topics include job analysis, test development, selection procedures, training, performance appraisal, job satisfaction, motivation, leadership, work stress, and careers. Research, practical applications, and cultural influences on work behavior are discussed. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 341 Group Dynamics

An examination of the structure, function, and interactive processes of groups. Research methods appropriate for the study of groups are stressed, and research findings are discussed. Special attention is given to interaction patterns and to personality attributes that influence modes of group interaction. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 345 Directed Study in Psychological Research

An opportunity for the advanced student in psychology to participate as a research assistant in a faculty-initiated and directed project. Ability to work with a degree of independence and to complete assigned tasks in accordance with the instructor's guidance is expected. The instructor is responsible for specifying the research topic(s), materials, and methodology. The student and the supervising professor are responsible for determining a contract that identifies the course objectives and the means for evaluating the student's performance. The course may be taken twice to allow students to pursue projects that require more than one semester, or to work closely with more than one faculty member. Note: Open to Psychology majors only.
Prerequisites: Junior Status, a minimum overall GPA of 2.75, a minimum GPA of 3.00 in the major, completion of two (2) of the four (4) Psychology Domains as specified by the supervising instructor, and approval of the supervising instructor and department chair.

## PSYC 354 Psychology of Prejudice

An overview of prejudice from a social psychological perspective including past and present theories and research. This course focuses primarily on ethnic/racial prejudice. Additional topics may include sexism, prejudice toward the LGBTQ community, and ableism. The course examines how and why prejudices form, why biases continue to exist, the consequences of prejudice, and methods of reducing discrimination. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 355 Contemporary Issues in Psychology

An in-depth examination of a current psychological issue with particular emphasis on the contributions of recent research. Topic and instructor are announced each year. Note: This is a writing intensive psychology course
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 369 Human Sexuality

An examination of human sexual development. Issues in development of sexuality are presented from both a theoretical and research basis emphasizing psychological, biological, environmental, and cultural perspectives. Students are required to master the literature on social policy issues around topics that may include abortion, pornography, AIDS and the right to privacy, homosexuals and parenting, forced sexual behavior, contraception and sex, private sex between consenting adults, incest, and the decriminalization of prostitution. Note: This is a writing intensive psychology course. Note: Credit is not given for both this course and CONS 270 Human Sexuality Education.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 370 Developmental Psychopathology

The study of functional disorders commonly originating before the age of 21. Psychiatric disorders resulting from genetic abnormalities and from environmental factors are studied, including affective and anxiety disorders, adjustment and conduct disorders, and posttraumatic stress disorders. Current medical and therapeutic treatments are examined. Familiarity with both normal child and normal adolescent development is strongly recommended. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 373 Psychology and the Law

An application of psychological topics to the legal profession with a focus on how psychological science enhances the judicial system. Topics may include juries, eyewitness testimony, trauma, false memory, voluntary/involuntary confession, mental illness, competency/insanity, child testimony, sentencing, cultural definitions of responsibility, media representations of crime and criminals, and discrimination within the system. Note: This is a writing intensive psychology course.
Prerequisites: Completion of two (2) 200-level PSYC or NEUR courses or permission of instructor.

## PSYC 383 Political Psychology

An application of psychological theories and processes to understanding political phenomena. Topics covered may include political polarization, misinformation, conspiracy theories, political violence and terrorism, social movements, voting behaviors, political leaders, and morality. Note: This is a writing intensive Psychology course.
Prerequisites: Completion of two (2) 200-level or above PSYC or NEUR courses or permission of instructor.

## PSYC 391 Research II: Quasi-Experimental and Experimental Methods

An enhancement of student understanding of psychology as a science through advanced quantitative research methods focused on quasi-experimental and experimental designs. Individually and/or in groups, students conduct ethical research, select or manipulate independent variables, produce codebooks, measure dependent variables, control or account for extraneous variables, evaluate properties of variables, determine appropriate statistical tests, use $\mathrm{SPSS}{ }^{\circledR}$ statistical software (to perform descriptives, $t$-tests and ANOVAs), prepare written American Psychological Associationstyle (APA) reports (integrating at least 8 peer-reviewed sources in the literature review in at least one report), and disseminate the research results in poster and/or presentation formats.
Note: Students may not receive credit for both PSYC 391 Research II: Quasi-Experimental and Experimental Methods and PSYC 351 Psychology Research II: Design and Statistical Applications. Prerequisites: Completion of PSYC 291 Research I: Descriptive and Correlational Methods with a minimum grade of C - and permission of instructor. Psychology majors only.

## PSYC 403 Practicum in Teaching of Psychology

An opportunity to serve as a teaching assistant on campus in a psychology course under the close supervision of the course instructor. Teaching assistants typically conduct class discussions, prepare class materials and demonstrations, assist in construction of examinations, and confer with students. Prerequisite: Approval of the supervising course instructor. Psychology majors only.

## PSYC 450 Empirical Research Thesis in Psychology

A culminating academic experience for Psychology majors during which students apply research methodology to the study of psychological topics. Working alone or in small groups, students complete at least one original empirical research project through stages of the research process, such as review of literature, hypothesis formulation, research design, data collection and analysis, and drawing conclusions. As one of the capstone courses for the major, students continue to develop their ability to think within the discipline, and they refine their communication skills through oral and written reports. They also apply and/or integrate knowledge about the scientific method, ethics, and diversity. Students create a final product for public dissemination. Research methods, content, and supervision structure may vary by instructor. Note: A minimum grade of $\mathrm{C}-(1.70)$ is required in this course in order to fulfill a psychology major capstone requirement. Note: This course is open to Psychology majors only.
Prerequisites: Second-semester junior status, completion of PSYC 391 Research II: QuasiExperimental and Experimental Methods with a minimum grade of $\mathrm{C}-(1.70)$, completion of one additional 300-level psychology course.

## PSYC 460 History and Systems of Psychology

A culminating academic experience for Psychology majors during which students investigate the history of psychology from early Greek philosophers to present day researchers and discuss the future of psychology. To understand core principles in the field, students read original historical and contemporary works. As one of the capstone courses for the major, students continue to develop their ability to think within the discipline, and they refine their communication skills through oral and written reports. They also apply and/or integrate knowledge about the scientific method, ethics, and diversity. Students create a final project for public dissemination. Note: A minimum grade of C(1.70) is required in this course in order to fulfill a psychology major capstone requirement. Note: Students cannot receive credit for this course and either PSYC 360 History and Systems of Psychology or PSYC 402 History and Systems of Psychology. Note: This course is open to Psychology majors only.
Prerequisites: Second-semester junior status, completion of PSYC 391 Research II: QuasiExperimental and Experimental Methods with a minimum grade of C- (1.70), completion of one (1) additional 300-level psychology course, completion of one (1) of the following: PHIL 102 Introduction to Ethics: Why Be Moral?, PHIL 105 Introduction to Political and Social Philosophy, or PHIL 118 Introduction to Philosophy of Science.

## PSYC 480 Psychology Seminar

A culminating academic experience for Psychology majors during which students read original research and theoretical papers covering a single area in psychology and take an active role in leading class discussions. Laboratory or field research may be required. As one of the capstone courses for the major, students continue to develop their ability to think within the discipline, and they refine their communication skills through oral and written reports. They also apply and/or integrate knowledge about the scientific method, ethics, and diversity. Students create a final project for public dissemination. Topic and instructor to be announced each semester. Note: Students cannot receive credit for both this course and PSYC 451 Psychology Seminar. Note: A minimum grade of C- (1.70) is required in this course in order to fulfill a psychology major capstone requirement. Note: This course is open to Psychology majors only.
Prerequisites: Second-semester junior status, completion of PSYC 391 Research II: QuasiExperimental and Experimental Methods with a minimum grade of C- (1.70), completion of one (1) additional 300-level psychology course.

## PSYC 490 Advanced Independent Study in Psychology

An opportunity for the advanced student in psychology to conduct an in-depth investigation of a special topic or to carry out original research. Ability to work with a high degree of independence is expected. The student is responsible for arranging with the cooperating professor a contract that specifies topics or material to be covered, methods of study, and method of evaluation. The course may be taken twice to allow the student to pursue a project that requires more than one semester, or to work closely with more than one faculty member. NOTE: Open to Psychology majors only. Prerequisites: Junior status, a minimum overall GPA of 2.75 , a minimum GPA of 3.00 in the major, completion of PSYC 291 Research I: Descriptive and Correlational Methods with a minimum grade of C- (1.70), completion of one (1) additional 300-level Psychology or Neuroscience course, and approval of the supervising instructor and department chair.

## PSYC 495 Internship in Psychology

A culminating academic experience for Psychology majors during which students work in a supervised field placement. The field work involves a minimum 120 total hours (approximately 8-10 hours/week) spread equally throughout the entire semester in an applied setting such as a community service agency, school, clinic, hospital, research facility or business. Students are responsible for securing a placement and presenting it to the course instructor for approval prior to the start of the semester. The field work is supported by class meetings on campus, and career planning is integrated into the course. As one of the capstone courses for the major, students continue to develop their ability to think within the discipline, and they refine their communication skills through oral and written reports. They also apply and/or integrate knowledge about the scientific method, ethics, and diversity. Students create a final project for public dissemination. Students are encouraged to work with Career Services and Employer Relations for guidance on the internship search process. Note: A minimum grade of C- (1.70) is required in this course in order to fulfill a psychology major capstone requirement. NOTE: Open to Psychology majors only.
Prerequisites: Junior status, completion of PSYC 391 Research II: Quasi-Experimental and Experimental Methods with a minimum grade of C-, completion of one (1) additional 300-level psychology course, and permission of instructor.

## QUANTATIVE COURSES

## QUAN 201 Quantitative Modeling for Business and Economics (Gen. Ed. Domain II-A)

A survey of the mathematical skills needed for upper division courses in economics and business. Emphasis is placed on the use of mathematical models to describe relationships in business and economics. Topics covered include mathematical functions, cost functions, the consumption function, systems of equations, market models, the Keynesian income determination model, matrix algebra, input-output analysis, differential and integral calculus, marginal analysis, and profit and utility maximization.
Prerequisite: ECON 101 Principles of Macroeconomics, ECON 102 Principles of Microeconomics, MATH 123 Introduction to Functions, or permission of the instructor.

## QUAN 202 Statistical Analysis for Business and Economics

An introduction to the basic techniques of descriptive and inferential statistics as applied to the decision-making process in business and economics. Emphasis is placed on estimation and forecasting techniques. Topics covered include measures of central tendency and dispersion, index numbers, probability, regression analysis and economic forecasting.
Prerequisites: ECON 101 Principles of Macroeconomics, ECON 102 Principles of Microeconomics, and either MATH 123 Introduction to Functions or eligibility to enroll in MATH 180 Precalculus, or permission of instructor.

## QUAN 305 Quantitative Methods in Business

The application of quantitative techniques to solve organizational problems. Topics covered include decision theory and models, analysis of risk, network analysis, linear programming, and the application of these topics through the use of problems and case analysis.
Prerequisite: QUAN 202 Statistical Analysis for Business and Economics, MRKT 181 Marketing Principles, and MGMT 280 Organizational Behavior.

## QUAN 470 Applied Econometrics for Economics and Business

A continuation of the material presented in Statistical Analysis for Business and Economics, concentrating on the application of these tools to the analysis of economics and business data. The course covers classical linear regression techniques (both simple and multiple regression) with emphasis placed on the necessary modifications to these procedures for use in economic and business applications. Topics covered include heteroskedasticity, auto-correlation, non-linear estimation, errors in variables, multicollinearity, dummy variables, distributed lags and simultaneous equation systems. Students use the computer to apply these concepts to actual data.
Prerequisite: QUAN 202 Statistical Analysis for Business and Economics or permission of the department chair.

## RAMS SEMINAR COURSES

## RAMS 101 First-Year Seminar

An opportunity for First-Year students to engage in a deep exploration of an important topic or theme. Topics are designed to engage student interest and develop the intellectual curiosity required to analyze complex issues. First-Year seminars require writing and help students develop the analytical skills needed for academic success. Students become skilled at using evidence-based reasoning. The seminar also introduces resources and strategies that support student success.

## RAMS 101AH First-Year Seminar: Storytelling through Art History (Gen. Ed. Domain III-C)

An exploration of a topic or theme in art history designed to engage First-Year students and to facilitate their transition to the University. Students examine art in its various forms and how issues of race, identity, diversity, and societal structure are portrayed through the various art forms over time. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

RAMS 101BI First-Year Seminar: Biological Perspectives (Gen. Ed. Domain II-B)
An in-depth exploration of a topic in biology designed to engage first year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of biology, from the level of molecules and cells to organisms and ecological systems. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No Laboratory. Note: Students who successfully complete this course cannot take a course with a BIOL prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 102BI First-Year Seminar: Biological Science and Society

(Gen. Ed. Domain III-C)
An examination of how biological science, scientific information and the process of science impacts society. Students examine how science is conducted within particular social structures, and how science can be used to help solve major societal problems. The role of ethics in conducting research and the utilization of data are also examined. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and the integration into the university community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101CH First-Year Seminar: Topics in Chemistry (Gen. Ed. Domain II-B)

An in-depth exploration of a topic in chemistry or biochemistry designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of chemistry or biochemistry, from the level of atoms and molecules in our daily life to everything in the Universe. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No Laboratory. Note: Students who successfully complete this course cannot take a course with a CHEM prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101CM First-Year Seminar: The Power of Communication (Gen. Ed. Domain III-B)

An exploration of a particular topic or theme within the field of Communication, Media, and Performance. In the process of a focused theoretical and practical examination of one or more of the many ways in which communication is powerful, First-Year students are introduced to resources and strategies that support student academic success and integration into the University community. Students work in groups and individually to craft creative and critical statements, both orally and in writing. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101DH First-Year Seminar: Explorations in Digital Humanities

## (Gen. Ed. Domain II-B)

A topic-based exploration of digital humanities. Students practice digital, analytical, and quantitative approaches to studying the human world, arts, and culture. The theme, texts, and tools covered vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101ED First-Year Seminar: Diverse Perspectives in Education

(Gen. Ed. Domain III-C)
An exploration of a topic central to educational research, theory, or practice, chosen to draw FirstYear students into a critical understanding of how diverse environments, contexts, and materials shape a learner's experiences. While engaging in a deep analysis of this selected topic, students are oriented to resources on and off campus related to academic and social supports, strategies for adjustment and success at the university, and effective ways to engage with the campus community. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 102ED First-Year Seminar: Education on Page and Screen

(Gen. Ed. Domain I-B)
An exploration of a topic central to the intersection of the discipline of education and the liberal arts, chosen to draw First-Year students into a critical understanding of how a variety of artistic, media, and literary artifacts shape our collective understanding of education and schooling. While engaging in a deep analysis of this selected topic, students are oriented to resources on and off campus related to academic and social supports, strategies for adjustment and success at the University, and effective ways to engage with the campus community. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101EN First-Year Seminar: Explorations in Literature

(Gen. Ed. Domain I-B)
An exploration of literature designed around a particular theme. First-Year students engage with a variety of texts and use literary or film analysis as the basis for their inquiry while being introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 102EN First-Year Seminar: Literature and the Contemporary World

## (Gen. Ed. Domain III-B)

An exploration of literature that focuses on human diversity in the contemporary world. First-Year students engage with a variety of texts and use literary or film analysis as the basis for their inquiry while being introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 103EN First-Year Seminar: Creative Thinking through Creative <br> Writing (Gen. Ed. Domain I-A)

An exploration of creative thinking through creative writing designed to engage First-Year students in interpretive work. Students read a range of texts and use literary or film analysis as a basis for their own creative writing. Students are introduced to resources and strategies that support student academic success and integration into the university community. The theme and texts covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.
RAMS 101ES First-Year Seminar: Earth Science Perspectives (Gen. Ed. Domain II-B)
An in-depth exploration of a topic in earth science designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of earth science. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. No Laboratory. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101EV First-Year Seminar: Environmental Science and Policy

## Perspectives (Gen. Ed. Domain III-B)

An in-depth exploration of a topic in Environmental Science and Policy designed to engage FirstYear students while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of environmental science or policy and may vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

RAMS 101FA First-Year Seminar: Topics in Fashion (Gen. Ed. Domain III-B)
A current approach to exploring ideas, trends, or concepts within the global fashion industry. Students engage in an in-depth examination of the approaches, practices, philosophies, theories and concepts surrounding the current industry landscape. This course helps First-Year students adjust to university life by introducing essential resources and strategies, supporting their academic success and integration into the university community. The topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101FN First-Year Seminar: Food, Nutrition, and Society

(Gen. Ed. Domain III-A)

An in-depth exploration of a historical topic or theme related to food and nutrition designed to engage first year students and to facilitate their transition to the University. Students explore changes to the food system over the course of time as well as the relevance of these changes to society. The historical time period(s) and topics covered vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101FS First-Year Seminar: Topics in Food Science (Gen. Ed. Domain II-B)

An in-depth exploration of a topic in food science designed to engage First-Year students and facilitate their transition to the University. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of food science, from farm to the fork. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the university community. No laboratory. Note: Students who successfully complete this course cannot take a course with a FDSC prefix to satisfy the General Education laboratory requirement. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101GY First-Year Seminar: Geographical Perspectives (Gen. Ed. Domain III-B)

An in-depth exploration of a topic in geography designed to engage First-Year students while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of geography or environmental studies and sustainability. Topics vary by semester and instructor. Students are introduced to resources and strategies that support student academic success and integration into the University community. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.
RAMS 101HI First-Year Seminar: Explorations of the Past (Gen. Ed. Domain III-A)
An exploration of a historical topic or theme designed to engage First-Year students in the work of historians and to facilitate their transition to the University. Students engage in a deep exploration of a significant topic or theme related to the past and the study of history while being introduced to resources and strategies that support student academic success and integration into the university community. The historical time period(s) and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 102HI First-Year Seminar: Commemoration and How We Remember the

## Past (Gen. Ed. Domain III-B)

An introduction to historical memory through the examination of contemporary debates about how ideas, events, and people of the past should be remembered. Commemoration is a result of contemporary choices: what to remember, what to forget, what to emphasize, how to present it. In this course, students study recent and ongoing controversies over how we remember certain periods and individuals from the past, examining the history of the periods, events, and individuals in question, the context for earlier decisions about commemoration, why these are being revisited today, and what current debates reveal about the concerns and priorities of our contemporary society while being introduced to resources and strategies that support student academic success and integration into the university community. The historical time period(s) and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 103HI First-Year Seminar: Topics in Cultural History (Gen. Ed. Domain I-B)

An exploration of cultural works related to a particular historical topic, theme, or time period designed to engage First-Year students in the interpretive work of cultural historians and to facilitate their transition to the University. Students analyze a range of cultural artifacts within their historical contexts while being introduced to resources and strategies that support student academic success and integration into the university community. The cultural artifacts, historical time period(s), and topics covered vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101NE First-Year Seminar: Topics in Neuroscience (Gen. Ed. Domain II-B)

An in-depth exploration of a topic in neuroscience designed to engage first year students while being introduced to resources and strategies that support academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of neuroscience. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

RAMS 102PH First-Year Seminar: Philosophy (Gen. Ed. Domain I-b)
An exploration of a philosophical topic or topics designed to engage First-Year students in philosophical works and to facilitate their transition to the University. Students engage in deep exploration of a philosophical topic or topics while being introduced to resources and strategies that support student academic success and integration into the University community. The philosophical topics covered vary by semester and instructor. NOTE: This course aligns with the RAMS 101 First-Year Seminar overreaching program description. Open to First-Year students only.

## RAMS 101PO First-Year Seminar: Political Perspectives (Gen. Ed. Domain III-B)

An exploration of a topic or theme in political science designed to engage First-Year students while being introduced to resources and strategies that support student academic success and integration into the University community. Topics may be drawn from various areas of the political science discipline, including American politics, international relations, comparative politics, legal studies, political theory, or public administration. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101PS First-Year Seminar: Psychological Perspectives (Gen. Ed. Domain III-B)

An in-depth exploration of a topic in psychology designed to engage First-Year students while being introduced to resources and strategies that support student academic success and integration into the university community. Students examine concepts and methods appropriate to the particular subject area, as well as the relevance of the topic to society. Topics may be drawn from any area of psychology, including biological psychology, cognitive psychology, developmental psychology, social \& personality psychology, and mental health. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 101SO First-Year Seminar: Social Dynamics, Culture, and Society (Gen. Ed. Domain III-B)

An exploration of a topic in sociology designed to engage First-Year students in the basic concepts and topic areas sociologists' study and to facilitate their transition to the University. Students are introduced to the study of topics such as culture, social interaction, social inequality, family dynamics, migration and other social issues, while being introduced to resources and strategies that support student academic success and integration into the University community. Topics vary by semester and instructor. Note: This course aligns with the RAMS 101 First-Year Seminar overarching program description. Open to First-Year students only.

## RAMS 301ES STEM Starter Academy Seminar

Designed to help transfer students thrive as STEM majors at the University by participating in a deep exploration of a significant topic or theme. Students complete subject-based reading, writing, and analysis to reinforce higher-level STEM skills and cultivate intellectual curiosity required to explore complex issues. Students enhance their skills using evidence-based reasoning for decision-making and communication. The seminar also introduces resources and strategies that support student success and encourage participation as a member of the University community. Note: This is only available to students in the STEM Transfer Academy Program.

## RUSSIAN COURSES

## RUSS 101 Elementary Russian I (Gen. Ed. Domain I-C)

An integration of language and culture designed to provide beginners with basic functional language skills and appreciation of Russian culture. Note: Heritage speakers and students with previous experience in this language must take a placement test.

## RUSS 102 Elementary Russian II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills and appreciation of Russian culture.
Prerequisite: RUSS 101 Elementary Russian I or permission of the instructor.

## SALES MARKETING COURSES

## SMKT 212 Sales Skills

An examination of the tools and techniques used in successful sales interactions. Students practice customer-focused, needs-based selling skills throughout the sales process. Personal selling skills, including questioning, active listening, identifying needs, positioning, handling objections, and closing are emphasized. Note: Students cannot receive credit for both this course and MRKT 375 Sales.
Prerequisite: MRKT 181 Principles of Marketing.

## SMKT 312 Advanced Sales Skills

A study and practice of advanced selling skills, communication strategies and techniques used to identify and leverage industry-specific prospects and client needs in order to build relationships and close sales. Industry specific sales role plays are used. Customer Relationship Management (CRM) software tools, such as Salesforce, are covered.
Prerequisite: MRKT 212 Sales Skills.

## SMKT 360 Sales Management and Leadership

An exploration of the characteristics and techniques of exceptional sales managers and leaders. Management and leadership styles are examined. Students explore the similarities and differences between managing and leading while discovering their individual management and leadership styles. How managers and leaders develop high- performing teams is discussed. This course covers sales training and coaching to develop effective sales managers. Note: Students cannot receive credit for both this course and MRKT 375 Sales.
Prerequisite: MRKT 212 Sales Skills.

## SMKT 490 Independent Study in Sales

An investigation of a topic in Sales selected by the student with supervision by a member of the Marketing Department. The selection of a topic is made by the student with written approval of the faculty supervisor. A final report and oral presentation are required. All proposals must be approved by the faculty supervisor and the Department Chair.
Prerequisites: MRKT 212 Sales Skills

## SMKT 495 Internship in Sales

A supervised practical experience in a public or private organization in sales. Before registering for the internship, the student must submit a job description of the sales internship and a proposal showing how the internship integrates with the Sales Concentration or Sales Minor. The internship requires a written critical reflection of the experience and an evaluation of the student's performance from the on-site work supervisor. Students may earn up to four (4) course credits through MRKT 495 Internship in Sales. Students may earn no more than two (2) course credits in any one semester and no more than two (2) course credits in a given internship in a single semester. Students may apply one (1) course credit toward a marketing or sales elective. The internship is not intended to satisfy or substitute for any of the courses required for the major. A minimum of 150 on-site hours is required for each course credit.
Prerequisites: Sophomore standing; MRKT 181 Marketing Principles; and students must be in good academic standing.

## SCIENCE COMMUNICATION COURSES

## SCOM 495 Internship in Science Communication

A supervised practical experience in communicating science in an approved professional setting. Students are expected to be involved in the development and finalization of oral, visual, and written materials in which scientific work is presented. A minimum of 160 on-site hours is necessary to complete the internship, and an application is required for all arranged internships. All internships must be approved by the SCOM internship coordinator and the student's major department chair. Note: Minor in Science Communication only.
Prerequisites: Junior standing, COMM 215 Science Communication, ENGL 311 Writing About Science, and two (2) science courses (see approved list in the minor).

## SCIENCE EDUCATION COURSES

## SCED 495 Internship in Informal Science Education

A supervised experience with an educational focus in a museum, nature center, community center or other field study situation. Students with diverse academic backgrounds are able to experience learning and teaching science - specifically geared towards general population. Students are expected to work a minimum of 120 hours for one (1) course-credit. The internship program is offered through the cooperation of participating institutions, which provide professional guidance for the interns. Any student who wishes to participate in an internship must complete the application in consultation with a faculty member from the department most appropriate to the discipline no later than the end of the semester prior to the beginning of the internship.
Prerequisites: Completion of at least three (3) courses in math or science prior to the start of the internship or permission of instructor; cumulative GPA of 2.50 or higher.

## SOCIOLOGY COURSES

## SOCI 101 Introduction to Sociology (Gen. Ed. Domain III-B)

An introduction to sociological perspectives on society. Students examine the basic concepts, research, and theories that sociologists use to increase understanding of often hidden social patterns, processes, and structures that shape everyday lives. Students explore such topics as culture, socialization, social interaction, social organization, and social institutions, as well as social issues in modern society. Special attention is given to social inequalities of race/ethnicity, class, and gender.

## SOCI 130 Social Problems (Gen. Ed. Domain III-B)

An introduction to sociology through the analysis of critical social problems, such as racism, sexism, class inequality, poverty, drug use, crime, and environmental destruction. Special attention is given to the social, economic, and political forces that cause these problems and to possible solutions.

## SOCI 203 Introduction to Critical Race Theory (Gen. Ed. Domain III-C)

An exploration of the foundations and central tenets of Critical Race Theory (CRT) from its origin to the formation of "offshoots," such as LatCrit, QueerCrit, and TribalCrit, that build from the theory. CRT posits that racism is embedded in social structure, and also serves as a framework for work towards social justice and praxis. In this course, students apply CRT to current debates around race relations and racial discrimination in the United States. Possible topics may include immigration, law, education, and other social systems. Students explore how CRT can be used as a toolkit to learn and navigate tensions around race and racism.
Prerequisite: ANTH 161 Cultural Anthropology, CRIM 121 Sociological Perspectives on Criminology, SOCI 101 Introduction to Sociology, or SOCI 130 Social Problems; or permission of the instructor.

## SOCI 204 Environmental Sociology (Gen. Ed. Domain III-C)

An exploration of the connection between critical environmental issues and social inequality. Students examine why environmental issues cannot be resolved solely by individuals or technologies and the importance of sociological and social justice dimensions. Topics covered may include the social and ethical implications of global warming; the effects of the environment on personal and social health; the role of race/ethnicity, class, and gender in environmental issues; and the politics of environmental destruction and restoration.

## SOCI 210 Latinxs in the United States (Gen. Ed. Domain III-C)

A sociological exploration of the experiences of the peoples of Latin American and Caribbean heritage living in the contemporary United States (U.S.). The course centers the experiences of Latinx groups to study the development of Latinx identities; the impacts of race, class, and gender on the immigrant experience; the development of Latinx communities in the U.S.; and the integration process of Latinxs into U.S. cultural and political life.

## SOCI 212 Sociology of Families (Gen. Ed. Domain III-B)

An examination of what constitutes a family historically and culturally, so as to understand the current state of families. Topics may include dating practices, marriage rituals, reproductive technologies, and family crises such as violence, death, and divorce. There is an emphasis on the influence of gender, race, and class on family life.

## SOCI 213 Social Class (Gen. Ed. Domain III-C)

An exploration of class inequalities and socioeconomic status. The course considers topics such as major social classes in society, determinants of class status, and interaction between social class and other social statuses. In addition, the class explores how distribution of resources affect life chances, quality of life, power, social standing, and beliefs. Note: Students cannot receive credit for both this course and SOCI 315 Social Class.

## SOCI 218 Women in Society (Gen. Ed. Domain III-B)

An examination of the changing meanings of femininity and womanhood in the United States. The course explores societal attitudes towards feminine identities and analyzes major issues impacting women in society. Students discuss the social, cultural, institutional, and social psychological forces that influence the lives of women and girls. Special attention is given to the impact of race/ethnicity, social class, and other aspects of power, privilege, and identity on women's status and experiences in society.

## SOCI 220 Sports in Society (Gen. Ed. Domain III-C)

An application of various sociological perspectives to the topic of amateur and professional sports. The dynamic relationship between sport as a social institution and inequalities of race, ethnicity, social class, and gender is explored extensively. Sports are examined as a force that both shapes and is shaped by individuals, social groups, organizations, and institutions.

## SOCI 226 Sociology of Rap and Hip Hop

An exploration of rap and hip hop cultures through the lens of sociology. Students use sociological concepts and theories to examine the social issues raised by rap and hip hop. Issues covered may include racism, social inequality, crime, globalization, cultural appropriation, sexuality, masculinity, femininity, and media representations of women. Emphasis is also placed on understanding rap and hip hop as a form of Black cultural expression, social commentary, and social protest.

## SOCI 230 Law and Society (Gen. Ed. Domain III-B)

A study of law as a process by which societies accomplish social control, settle disputes, and foster or impede social change. Focusing on the United States, the course examines connections among the law, history, technology, religion, the economy, and politics.
Prerequisite: Any course in Anthropology, Sociology, Criminology, Political Science, or HSTY 111 United States History to Reconstruction or HSTY 112 United States History since Reconstruction; or permission of instructor.

## SOCI 233 Reproductive Rights and Reproductive Justice

A sociological examination of reproductive rights and reproductive justice. Students explore how changing social and cultural contexts influence attitudes towards reproduction and pregnancy, access to reproductive healthcare, and understandings of reproductive rights and reproductive justice. Emphasis is placed on the role of institutions and social movements in developing and contesting the meaning of reproductive freedom in society. Special attention is paid to the impact of race, class, gender, and religion on reproductive issues. Topics covered may include contraception, abortion, infertility, technology, eugenics, forced sterilization, welfare, and foster care.

## SOCI 237 Capitalism, Race, and Social Control

A sociological examination of the entanglements of capitalism and race. Students explore how racial and economic systems of exploitation are intertwined and how the production of racial difference has enabled the deepening of wealth inequality and social control under capitalism. Topics may include white supremacy as class domination; gender/sexuality, race and class as triple oppression; governing urban poverty through racial segregation; and the role of race and class in overpolicing, incarceration and other forms of social discipline.
Prerequisite: Any course in Anthropology, Sociology, or Criminology; or permission of the instructor.

## SOCI 245 Race and Ethnicity (Gen. Ed. Domain III-C)

An examination of the systemic foundations and impacts of race and ethnicity. Students explore the political, social and economic ramifications of racial and ethnic inequalities.

## SOCI 248 Identity, Self, and Society

An exploration of the relationships between individuals, society, and identity. Attention is directed to how structure informs the self in the construction of identity. Students explore topics such as self and identity, the process of socialization, and social influences on the individual.

SOCI 254 Social Conflict in Northern Ireland and Ireland (Gen. Ed. Domain III-C)
An exploration of the social conflict and peace process in Ireland and Northern Ireland since the colonization of the Irish Island. Attention is given to the factors that led to the prolonged and bloody conflict and its political resolution. This course helps students to understand the factors that contributed to both the conflict and the sustained peace, with particular emphasis on the importance of cultural inclusion. In studying conflict within such a divided society, students analyze a variety of topics, including education, politics, gender, religion, human rights, and policing. By focusing on the case of Northern Ireland, the Republic of Ireland, and Britain, lessons are offered about enduring conflicts in the United States that persist along lines of group membership and identity.

## SOCI 255 LGBTQ Communities in the United States

A sociological examination of the experiences of lesbian, gay, bisexual, transgender, and queer (LGBTQ) people in the United States. Students explore how social and cultural contexts impact LGBTQ identities, the development of LGBTQ communities, the LGBTQ rights movement, the influence of cultural norms, social stigmas, and institutional policies on LGBTQ communities, as well as current issues facing LGBTQ communities. Emphasis is placed on theory, research, and the intersections of race, class, gender, and sexuality within LGBTQ communities.
Prerequisites: One (1) of the following: ANTH 161 Cultural Anthropology, ANTH 253 Gender Across Cultures, ANTH 258 Critical Approaches to Men and Masculinities, SOCI 101 Introduction to Sociology, SOCI 130 Social Problems, or SOCI 218 Women in Society; or permission of instructor.

## SOCI 263 Social Inequality (Gen. Ed. Domain III-B)

An exploration of how gender, class, race/ethnicity and other social structures of inequality intersect to produce disparities of power, status, and everyday experiences of life.

## SOCI 264 Black Communities and Institutions (Gen. Ed. Domain III-B)

A sociological examination of the social/cultural institutions within Black communities. Students explore Black social/cultural institutions that may include the family, religion, education, and civic organizations. Emphasis is placed on understanding the impact of Black social/cultural institutions on Black identities and Black communities. Special attention is given to the influence of Black protest movements, the diversity within the African diaspora, and Black arts and culture in modern society. Students also examine the intersections of gender, ethnicity, nationality, class, and sexuality within Black social/cultural institutions and communities.

## SOCI 282 Society, Technology, and the Future (Gen. Ed. Domain III-B)

An exploration of the significant impacts this technological revolution is having on our lives. Topics may include technology-based learning, virtual identities, online relationships, multitasking, security and privacy, and advances in reproductive technology.

## SOCI 288 Immigration in the United States (Gen. Ed. Domain III-C)

An exploration of the social consequences of immigration. Topics include how immigrants and their children integrate into American society and how white and nonwhite immigrants compare to nativeborn whites and nonwhites with respect to socioeconomic outcomes such as residential and occupational attainment.

## SOCI 290 Topics in Sociology

A study of a selected special subject in sociology to be given from time to time at the discretion of the Department. Topics presented here are on a one-time-only basis. Students may take this course more than once if a different topic.

## SOCI 300 Animals and Society

An exploration of the many roles non-human animals play in our lives - including as sources of food, companionship, and entertainment. Emphasis is placed on the social origins of our attitudes toward other species. Students consider how people balance the idea that animals exist for our benefit with the concept of animal rights. Likewise, the course examines how determinations of which animals are appropriate or inappropriate to eat varies across cultures and religious traditions.
Prerequisite: Any 100-level course in Anthropology, Criminology, or Sociology.

## SOCI 301 Sociological Theory

An examination of influential explanations regarding the workings of modern society. The course considers enduring concerns such as what drives "progress," what creates social order or crisis, why social divisions exist, and how social forces and individual attitudes and actions influence one another. Note: Open to Sociology Majors or Minors only.
Prerequisites: Sophomore standing; SOCI 101 Introduction to Sociology or SOCI 130 Social Problems; and one (1) other sociology course; or permission of instructor.

## SOCI 302 Quantitative Methods I - Research Design

The first of two (2) quantitative research methods courses. Students learn to synthesize existing scholarly work in order to write literature reviews that guide students as they design quantitative research projects. The research proposed in SOCI 302 Quantitative Methods I - Research Design is completed in the second quantitative research methods course, SOCI 303: Quantitative Methods II Data Collection \& Analysis. Note: Open to Sociology Majors only.
Prerequisites: CRIM 301 Criminological Theory or SOCI 301 Sociological Theory.

## SOCI 303 Quantitative Methods II - Data Collection \& Analysis

A continuation of original research projects developed in SOCI 302 Quantitative Methods I Research Design. Students work in teams to collect and analyze data and present findings in written and oral formats. Note: Open to Sociology Majors only.
Prerequisites: A grade of C- (1.70) or higher in SOCI 302 Quantitative Methods I - Research Design.

## SOCI 306 Nonprofit Giving

An exploration of the impacts of charitable giving. The course examines issues facing marginalized individuals and communities. Students get hands-on experience in evaluating local organizations that are working to address the root causes of these issues.
Prerequisites: Sophomore standing and any course in Anthropology, Sociology, or Criminology; or permission of instructor.

## SOCI 308 Political Sociology: Who Rules?

An examination of political power in society. The course addresses questions such as: Who rules a nation? How democratic is the United States and how democratic should it be? Which social conditions and processes foster democracy and which obstruct it? How do we explain recent shifts in the balance of sociopolitical power? What future political changes are likely, possible, and desirable?
Prerequisites: Sophomore standing and any course in Anthropology, Sociology, Criminology, or Political Science; or permission of instructor.

## SOCI 312 Sociology of Childhood and Adolescence

An exploration of sociological issues, theories, and research on childhood and adolescence. The course examines the social worlds provided for and created by children and adolescents. Changing definitions of and socialization patterns in childhood and adolescence over time and across cultures are discussed.
Prerequisite: A 100-level Sociology course or ANTH 161 Cultural Anthropology or permission of instructor.

## SOCI 320 Qualitative Methods - Uncovering Meaning in the Social World

An examination of the richness of social interaction. The experiences, attitudes, opinions and meanings of different social groups are analyzed through the lens of qualitative research techniques such as interviews, observations, and content analyses. Students are introduced to the theoretical underpinnings of qualitative methodology and engage in data collection and analysis.
Prerequisites: CRIM 301 Criminological Theory or SOCI 301 Sociological Theory. Open to Criminology and Sociology Majors only.

## SOCI 321 Social Policy in Our Lives

An exploration of three questions: What is social policy? How do social research and theory generate and evaluate policy? How is policy implemented, changed, or overturned? The sociological imagination - the notion that large and impersonal forces shape everyday practice - directs this study of policy to identify cultural, political, and historical forces that lead policy to influence nearly every aspect of life. Topics may include regional, national, and international policies related to poverty, immigration, family, sexuality, gender, criminal legislation, and racial justice.
Prerequisites: Sophomore standing and any two Anthropology, Sociology, Criminology, or Global Studies courses.

## SOCI 325 Health and Illness

An examination of health and illness in society. Special attention is given to social determinants of health, how social inequality affects access to healthcare, and how individuals and society make meaning of health and illness. Topics covered may include social definitions and experiences of health and illness, societal responses to health crises, disability, the incidence and prevalence of illness, the physician-patient relationship, and the organization of the healthcare system.
Prerequisite: Sophomore standing and any course in Anthropology, Sociology, or Criminology; or permission of the instructor.

## SOCI 333 Society, Mental Health, and the Individual

A sociological exploration of the relationship between society, mental health, and the individual. The course examines how certain behaviors and attributes become perceived as mental health issues, the history and current status of medical knowledge and treatment, social attitudes toward those diagnosed with psychiatric disorders, the experience of illness from the patient's perspective, and the legal and economic issues associated with the treatment of psychiatric illness.
Prerequisites: Sophomore standing and any course in Anthropology, Sociology, or Criminology; or permission of the instructor.

## SOCI 340 Sociology of Work

An investigation of different types of work and their role in people's lives. Students examine how race, gender, social class, and historical forces influence entrance into various occupations, as well as the timing and sequencing of work and career-related events. In addition, students address issues such as sexual harassment, working conditions, and worker satisfaction.
Prerequisites: Sophomore standing and any course in Anthropology, Sociology, or Criminology; or permission of the instructor.

## SOCI 342 People and Organizations

An investigative analysis of large organizations. Emphasis is placed on the values, beliefs, and behaviors that define an organization's culture.
Prerequisite: A 100-level Sociology course or permission of instructor.

## SOCI/EDUC 350 Education and Social Change

An examination of two interrelated themes: how social change shapes education and how education expresses social change. Through applied topics such as education's influences on social inequalities through different forms of education, the relationship between the economy and education, and the history of schooling in the United States, students learn key concepts of social change and education and of the relationship between the two. Readings include theory, research, history, and issuesfocused articles pertaining to these topics. Students assess contemporary media on education and social change, and they complete independent projects related to topics in education and social agendas.
Prerequisite: SOCI 101Introduction to Sociology, SOCI 130 Social Problems or EDUC 200
Foundations of Secondary Education with Pre-Practicum I.

## SOCI 356 Social Movements

An introduction to social movements, revolts and revolutions around the world. The course revisits new approaches in studying collective social actions and addresses different manifestations of fundamental social transformations around the globe. The course particularly focuses on the rise of street politics, motivations for participation, and successes and failures of movements.
Prerequisite: ANTH 161 Cultural Anthropology or any 100-level course in Criminology, Global Studies, Political Science, or Sociology.

## SOCI 357 Sociological Perspectives on Globalization

An exploration of how the $21^{\text {st }}$ century has brought the world to a new level of interconnectedness. Globalization raises a series of questions about the way we view communities, nations, cultures, and international institutions. At every level of interaction, from working in communities to multinational corporations, there are pressing issues of how best to promote economic development, democracy, community, and social justice. To address the variety and complexity of all these issues, this course explores various issues related to globalization and the social, political, economic, and cultural interconnections of the world by combining community experience and academic study.
Prerequisite: A 100-level Sociology course or ANTH 161 Cultural Anthropology or permission of instructor.

## SOCI 359 Sex/Sexualities in Society

An examination of patterns of human sexual behavior and attitudes toward sexuality. Students examine theories of sexualities and review research on sexual behaviors and identities. This course gives special attention to the role of the state, the power of social norms, and the influence of institutions on sexuality. Topics covered may include sexual identities, same-sex marriage, sex education, romantic relationships, sex work, sexual consent, and representations of sexuality in media and culture. Emphasis is placed on how gender, race, ethnicity, social class, and other facets of identity and difference impact understandings and experiences of sexuality.
Prerequisites: Sophomore standing and any course in Anthropology, Sociology, or Criminology; or permission of the instructor.

## SOCI 366 Death and Dying

An exploration of the various ways that people understand and respond to the realities of death and dying. These topics are considered within the context of American society as well as cross-culturally and across religious traditions.
Prerequisite: Sophomore status or permission of the instructor.

## SOCI 400 Topics in Sociology

A study of selected special subjects in sociology and anthropology to be given from time to time at the discretion of the Department. Topics presented here are on a one-time-only basis and are not a permanent part of the curriculum.
Prerequisite: Junior status and one (1) ANTH, CRIM or SOCI course; or permission of instructor.

## SOCI 480 Sociology Senior Thesis Seminar

An opportunity for students who seek to expand upon and further develop their research methods project or to initiate a new or related in-depth project. Course work involves creating and completing a research project that culminates in a major paper for presentation at a departmental student research colloquium. Class meetings involve weekly presentations of work progress, research issues, and new discoveries in the literature and in students' research.
Prerequisites: SOCI 303 Quantitative Methods II - Data Collection and Analysis and senior standing. Sociology majors only.

## SOCI 490 Independent Study in Sociology

An in-depth investigation in a specific topic relating to the student's interest in sociology. The selection is made by the student with written approval of the faculty advisor. Oral presentation and final written report required. Limited enrollment.
Prerequisite: Junior status; a 100- level course in Sociology or Anthropology; permission of instructor.

## SOCI 495 Internship in Sociology

A first-hand exploration of careers related to sociology through the prism of an internship chosen by the student in either a nonprofit, for-profit, or government organization. Students are expected to work at their internship site for a total of 120 hours per semester and to take notes about what they are observing on the job. In class, students discuss readings in order to make sense of their observations and to develop a term paper about some aspect of their internship site. Note: Students may earn up to two (2) internship course-credits, which may be taken during two (2) separate semesters, as long as the content of the experience is substantially different.
Prerequisites: Junior status; two (2) Sociology courses, one of which must be at the 200 level or above; and permission of instructor.

## SPANISH COURSES

## SPAN 101 Elementary Spanish I (Gen. Ed. Domain I-C)

An integration of language and culture designed to provide beginners with basic functional language skills and an appreciation of Hispanic cultures. Note: Heritage speakers and students with previous experience in this language must take a placement test.

## SPAN 102 Elementary Spanish II (Gen. Ed. Domain I-C)

A continuation of the study of language and culture designed to provide beginners with basic functional language skills and an appreciation of Hispanic cultures.
Prerequisite: Students must complete SPAN 101 or have the corresponding placement test score or have prior approval of instructor in order to enroll in SPAN 102.

## SPAN 201 Intermediate Spanish I (Gen. Ed. Domain I-C)

An intermediate Spanish course in which students are trained to become independently functional in the Spanish language and knowledgeable about Hispanic cultures and thought. Discussions are in Spanish and based on cultural materials. The course also includes a comprehensive grammar review. Prerequisite: SPAN 102 Elementary Spanish I or the equivalent placement test score or prior approval of instructor.

## SPAN 202 Intermediate Spanish II (Gen. Ed. Domain I-C)

A continuation of Intermediate Spanish I. Students gain further training in order to become independently functional in the Spanish language and knowledgeable about Hispanic cultures and thought. Discussions are in Spanish and based on cultural materials. The course also includes a comprehensive grammar review.
Prerequisite: SPAN 201 Intermediate Spanish I or the equivalent placement test score or prior approval of instructor.

## SPAN 210 Cinema for Spanish Conversation (Gen. Ed. Domain I-C)

An intermediate conversation course designed to develop fluency and accuracy of comprehension, speaking, and writing through film and cultural analysis. Students explore several aspects of life and culture in the Spanish-speaking world and the United States including identity, history, politics, class issues, gender roles, regional language, and arts. Students improve their Spanish conversational skills and Spanish vocabulary through the discussion of Spanish-language films. Class conducted in Spanish.
Corequisite: SPAN 202 Intermediate Spanish II or permission of the instructor.

## SPAN 211 Advanced Spanish Grammar and Conversation

A continuation in the development of spoken language, including a review of pronunciation and grammar. Attention is given to the finer points of grammar and speaking skills. Class discussions are based on Hispanic themes and on topics of contemporary interest. Conducted in Spanish. Note: Students may not earn course credit for both this course and SPAN 301 Advanced Spanish Composition \& Conversation I.
Prerequisite: SPAN 202 Intermediate Spanish II, equivalent placement test score, or prior approval of the instructor.

## SPAN 212 Advanced Spanish Grammar and Composition

A continuation in the development of written language, including a review of grammar. Attention is given to the finer points of grammar and composition skills. Class writings are based on Hispanic themes and on topics of contemporary interest. Written exercises may include multiple forms of writing, such as letters, opinion papers, film and literature reviews, comparative essays, and news articles. Conducted in Spanish. Note: Students cannot earn course credit for both this course and SPAN 302 Advanced Spanish Composition \& Conversation II.
Prerequisite: SPAN 202 Intermediate Spanish II, equivalent placement test score, or prior approval of the instructor.

## SPAN 225 Business Communications in Spanish (Gen. Ed. Domain I-C)

A practical application of the Spanish language for business purposes. Students practice their written and oral communication skills for discourse in professional settings. Discussions are in Spanish and address cultural aspects of business in Spanish-speaking environments. This course may include topics such as banking, commerce, labor, management, government, public relations, human resources, and their impact on businesses. This course also includes a comprehensive grammar review.
Prerequisite: SPAN 201 Intermediate Spanish I or the equivalent placement test score; or permission of instructor.

## SPAN 234 Music and Culture in the Hispanic World (Gen. Ed. Domain I-C)

A study of the concept of song as a discursive genre in the musical production of Latin America and Spain through the connection between music and lyrics. Students analyze representative singersongwriters and pop artists to become familiar with the nuances of multiple music styles including but not limited to tango, bolero, salsa, cumbia, flamenco, reggaetón, hip-hop, and rock. Students practice intermediate grammar and vocabulary as they analyze the development of music and culture in the Hispanic world. Conducted in Spanish.
Prerequisite: SPAN 202 Intermediate Spanish II or the equivalent placement test score; or prior approval of instructor.

## SPAN 245 Interpreting Hispanic Literature

An intermediate step between language-oriented courses and those dealing with literature. Students practice techniques for reading and interpreting Hispanic texts, including narrative, drama, and poetry. The course focuses on the consolidation of reading skills with an emphasis on the acquisition of critical vocabulary and methods to analyze texts representing the diverse voices of Spain and Latin America. Classes are conducted in Spanish. Note: Students may not receive credit for this course and SPAN 320 Introduction to the Analysis of Hispanic Texts.
Prerequisite: SPAN 202 Intermediate Spanish II or permission of instructor.

## SPAN 333 Iberian Culture and Civilization

A panoramic survey of Iberian culture and civilization from the nineteenth century through the twenty-first. Students explore the recent history of Spain, studying political, economic, and social movements, as well as cultural trends. The course may include readings from books such as Mater Dolorosa. La idea de España en el siglo XIX (José Álvarez Junco), España y las luchas por la modernidad (Fernando Operé and Eliseo Valle), and Los nuevos españoles (John Hooper). Additional readings may include articles from newspapers such as El País and ABC, and screenings of historical and contemporary films. Conducted in Spanish.
Prerequisite: SPAN 211 Advanced Spanish Grammar and Conversation, SPAN 212 Advanced Spanish Grammar and Composition, or prior approval of the instructor.

## SPAN 334 Latin American Culture and Civilization

A survey of Latin American cultures, studied chronologically from the pre-Columbian Mayan, Aztec and Inca civilizations to the present. The predominant cultural currents and artistic developments are studied. The course is conducted in Spanish.
Prerequisite: SPAN 211 Advanced Spanish Grammar and Conversation or SPAN 212 Advanced Spanish Grammar and Composition or prior approval of the instructor.

## SPAN 341 Survey of Iberian Literature

A panoramic survey of the last two hundred years of Spanish literature. Students explore representative literary movements of modern Spain, studying works from the Enlightenment, Romanticism, Realism, Naturalism, the Avant Garde, Modernism, and Postmodernism in terms of their historical, intellectual, artistic and cultural contexts. Readings may include works by Duque de Rivas, Mariano José de Larra, Espronceda, José Zorrilla, Emilia Pardo Bazán, Benito Pérez Galdós, Leopaldo Alas (Clarín), Antonio Machado, Federico García Lorca, Ana María Matute, Carmen Martín Gaite, Carmen Laforet, Manuel Rivas, and María Folguera. Conducted in Spanish.
Prerequisite: SPAN 245 Interpreting Hispanic Literature, or prior approval of the instructor.

## SPAN 342 Survey of Latin American Literature

A study of Latin American literature designed to offer students a wide scope of readings from the nineteenth century to the present. Students explore the diversity and range of the Latin American experience and analyze poetry, fiction, memoirs, and drama by authors such as Esteban Echeverría, Domingo F. Sarmiento, Rómulo Gallegos, Luisa Levinson, Jorge Luis Borges, Juan Onetti, Clarice Lispector, Rosario Ferré, Reinaldo Arenas, and Julio Cortázar. Conducted in Spanish.
Prerequisite: SPAN 245 Interpreting Hispanic Literature or prior approval of the instructor.

## SPAN 375 Graphic Narrative

An introduction to the academic study of graphic narrative including comics, graphic novels, and social media posts. The course includes texts from a transnational corpus in Spanish. It introduces students to different themes, such as war and conflict, testimony, and political activism, and the comic medium's unique way of presenting these topics. The course emphasizes literary analysis, critical thinking, language and research skills. The course may include theoretical readings by comics scholars such as Scott McCloud, Hillary Chute, Nick Sousanis, and Thierry Groensteen, as well as readings specific to Hispanic graphic narratives. Texts studied may include work by authors such as Quan Zhao, Ana Penyas, Santiago García, Paco Roca, Antonio Altarriba, Raquel Córcoles, Liniers, Maitena, Pepita Sándwich, among others. Conducted in Spanish.
Prerequisite: SPAN 245 Interpreting Hispanic Literature or prior approval of the instructor.

## SPAN 382 Television and New Media in the Hispanic World

An advanced course on Latin American and Spanish film, television, and culture that examines the recent shift in media and cultural consumption on online streaming platforms. Students screen a variety of television and film programs on Netflix and other Subscription Video On-Demand services (SVODs) from both Spain and Latin America. Students analyze these works and utilize listening, writing, reading, and speaking skills to discuss them in class. Furthermore, the students explore theories of communication and media studies in the twenty-first century by linking these concepts with Spanish-language film and television. Conducted in Spanish.
Prerequisite: SPAN 211 Advanced Spanish Grammar and Conversation, SPAN 212 Advanced Spanish Grammar and Composition, or SPAN 245 Interpreting Hispanic Literature; or prior approval of the instructor.

## SPAN 388 Spanish Cinema in Post-Franco Spain

An exploration of Spanish culture and history through the cinematographic representations of various films and texts. The class covers the main social, political, and economic aspects of Spanish life from the death of Francisco Franco in 1975 until today. Analysis of audiovisual material and textual sources helps to illustrate the connections and discontinuities of various movements during this period, among them: the Franco dictatorship, the new Democratic period, and current postmodern Spain. Conducted in Spanish.
Prerequisite: SPAN 211 Advanced Spanish Grammar and Conversation, SPAN 212 Advanced Spanish Grammar and Composition, or SPAN 245 Interpreting Hispanic Literature; or prior approval of the instructor.

## SPAN 400 Introduction to Translation: Spanish-English/English-Spanish

A combination of translation theory with hands-on practice using a variety of activities from several areas of professional specialization. This course helps students learn to translate simple documents and prepares them for further translation study in professional training programs. This course is for students at an advanced level of both English and Spanish. Conducted in Spanish.
Prerequisite: SPAN 211 Advanced Spanish Grammar and Conversation or SPAN 212 Advanced Spanish Grammar and Composition or prior approval of the instructor.

## SPAN 425 Contemporary Spanish Cultural Expression

An exploration of different narratives of cultural identity in contemporary Spain, particularly from the period of the political transition from dictatorship to democracy (from 1975 to the present). This course allows students to gain a critical awareness of narratives of cultural and political identities and issues in contemporary Spain. Students interact with a variety of media and forms of cultural production in order to draw well-informed conclusions about the topics covered.
Prerequisites: SPAN 301 Advanced Spanish Composition \& Conversation I and SPAN 302 Advanced Spanish Composition \& Conversation II, or approval of the instructor.

## SPAN 426 The Spanish Civil War

A study of the Spanish Civil War. This course examines representations of the Spanish Civil War, the post-war period, and the Franco dictatorship in diverse media such as literature, film, television, comics, poetry, posters, and photography. Students analyze texts produced during and after the war, and examine the intersections between history, art, and politics. Texts and films studied may include The Spanish Civil War: A Very Short Introduction. (Helen Graham), Requiem por un campesino español (Ramón Sender), Nada (Carmen Laforet), La lengua de las mariposas, El laberinto del fauno, La voz dormida, and ¡Ay Carmela!. Conducted in Spanish.
Prerequisite: One (1) 300-level Spanish course or prior approval of the instructor.

## SPAN 431 Contemporary Trends of the Hispanic World

An advanced course designed to introduce students to sociopolitical, philosophical, and cultural trends that have shaped Latin America and Spain. While readings are assigned from literary and nonliterary sources, the thrust of the course is practical, with students giving frequent reports, both oral and written. Readings are in Spanish. Conducted in Spanish.
Prerequisites: One (1) 300-level Spanish course; or prior approval of the instructor.

## SPAN 435 The Boom in Latin American Literature

Selected readings in the literature of such noted Latin American authors as Borges, Donoso, Garcia Marquez, and Fuentes. Conducted in Spanish.
Prerequisites: SPAN 301 Advanced Spanish Composition and Conversation I or SPAN 302 Advanced Spanish Composition and Conversation II and two other 300- or 400-level Spanish courses; or prior approval of the instructor.

## SPAN 437 Spanish Theatre and Poetry of the Twentieth Century

A critical study of the main trends of Spanish theater and poetry of the twentieth century. Conducted in Spanish.
Prerequisites: SPAN 301 Advanced Spanish Composition and Conversation I or SPAN 302 Advanced Spanish Composition and Conversation II and two other 300- or 400-level Spanish courses; or prior approval of the instructor.

## SPAN 448 Controversial Cinema in Latin America

A study of "new wave" Latin American cinema. The focus of the course is on films that deal with controversial topics such as female violence, torture, the drug trade, sexuality issues and alternative families in contemporary Latin American societies. When appropriate, corresponding literary texts are examined. Film viewing, class discussions, related readings and assignments are in Spanish. Prerequisite: One (1) 300-level Spanish course or prior approval of the instructor.

## SPAN 480 Seminar in Spanish

A capstone experience for the Spanish major. Guided by the instructor, students choose topics and primary texts. Drawing on skills gained throughout the major, students develop historical and cultural contexts for the texts, apply a variety of critical theories, approaches, and methodologies; students write a substantial, theoretically informed research essay and present it to faculty and other Spanish majors. Conducted in Spanish.
Prerequisites: Senior standing with eight (8) courses in Spanish. Second-semester juniors may only take the course with permission of the instructor and department chair.

## SPAN 490 Independent Study in Spanish

An in-depth investigation of a topic in the areas of literature, culture, linguistics or pedagogy, selected by the student under the guidance of a member of the World Languages Department. Regular meetings with the faculty advisor are to be arranged. A written report is required. Note: Limited to juniors and seniors.
Prerequisite: Advanced knowledge of Spanish literature and culture. This course is not meant to be a replacement for major required courses.

## SPAN 495 Internship Practicum in Spanish

A supervised practical experience which complements the course work of the student in a field study setting. The experience requires individual consultations with the advisor, and a research project. Admission to the internship is limited to seniors in World Languages and requires a 2.50 GPA . Offered on a quarter or full-semester basis, the internship counts as either one or two courses toward the major requirement, according to the number of hours devoted to the field experience.

## SPORTS MANAGEMENT COURSES

## SPMG 262 The Business of Fantasy Sports

An exploration of fantasy sports and their connection to the greater landscape of the sports-based economy. The business of traditional fantasy sports, daily fantasy sports, sports betting, and esports are examined. Topics include the history and growth of fantasy sports, sports betting, and esports as well as the regulatory environment's impact on fantasy sports and sports betting. Students explore the current state and evolution of the industries; the relationship between fantasy sports, professional leagues, and sporting businesses; the industry of fantasy sports analysis; strategies for fantasy and betting improvement; and the societal criticisms and merits of fantasy sports. Note: Students cannot earn credit for both this course and MGMT 262 The Fantasy Sports Business or MRKT 262 The Fantasy Sports Business.

## SPMG 301 Sports Management

An exploration of the management principles, procedures, and operations of professional sports, collegiate athletics, and recreational organizations. Elements for successful administration of sport and recreation organizations are included. Topics, such as leading, planning, marketing, financing, and facility and event management are introduced.
Prerequisite: MGMT 280 Organizational Behavior or MRKT 181 Marketing Principles.

## SPMG 321 Sports Facility and Event Management

An examination of the principles and practices of operating sport and recreation facilities and managing sport related events. Designing, planning, controlling and supervising of sport facilities and sport event logistics are covered. Box office management, security, safety, medical services, housekeeping, maintenance, concessions, merchandise, risk management, insurance, media marketing, sponsorship, hospitality, and assessment of sporting events are included.
Prerequisite: MGMT 280 Organizational Behavior.

## SPORTS MARKETING COURSES

## SPMK 324 Sports Marketing

An examination and application of marketing principles in the area of sports. Students develop an understanding of the marketing concepts and theories that apply to sports and sporting events. Topics include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports marketing plans for the professional and collegiate levels. Promotional plans, use of sport sponsorships by commercial enterprises to help market products and services, event evaluation and management techniques are also covered. Class projects emphasize original research into sports marketing topics, with the potential to collaborate with industry professionals.
Prerequisite: MRKT 181 Marketing Principles.

## STATISTICS COURSES

## STAT 107 Business Statistics (Gen. Ed. Domain II-A)

An introduction to the discipline of statistics, emphasizing its applications in a business context. Topics include descriptive and inferential statistics, relevant probability distributions such as normal and binomial, regression, confidence intervals, and hypothesis testing. Appropriate statistical software such as Microsoft Excel or R is explored for both computation and presentation. Note: Students may not receive credit for both this course and STAA 127 Statistics for Social Sciences, STAT 117 Introduction to Statistics, STAT 157 Probability and Statistics, or STAT 203 Statistics for the Natural Sciences.
Prerequisite: Satisfactory mathematics placement.

## STAT 107R Business Statistics (Gen. Ed. Domain II-A)

An introduction to the discipline of statistics, emphasizing its applications in a business context. Topics include descriptive and inferential statistics, relevant probability distributions such as normal and binomial, regression, confidence intervals, and hypothesis testing. Appropriate statistical software such as Microsoft Excel or R is explored for both computation and presentation. This course includes an additional one-hour per week lecture recitation. Topics may vary by section at the discretion of the instructor with the goal of supporting students' readiness for, and success, in the lecture course. Note: Students may not receive credit for both this course and STAA 127 Statistics for the Social Sciences, STAT 117 Introduction to Statistics, STAT 157 Probability and Statistics, or STAT 203 Statistics for the Natural Sciences.

## STAT 117 Introduction to Statistics (Gen. Ed. Domain II-A)

An introduction to the discipline of statistics, emphasizing both statistical thinking and analysis of real-world data. Topics include sampling, organizing and exploring data, probability distributions such as the normal distribution, sampling distributions, hypothesis testing and confidence intervals, and correlation and regression. Emphasis is placed on the analysis of collected data in order to apply an appropriate inferential test. Students are expected to express results of statistical procedures in ordinary non-technical language. Appropriate statistical software is explored. Note: Students may not receive credit for both this course and STAA 127 Statistics for Social Sciences, STAT 107 Business Statistics, STAT 157 Probability and Statistics, or STAT 203 Statistics for the Natural Sciences.
Prerequisite: Satisfactory mathematics placement.

## STAT 117R Introduction to Statistics (Gen. Ed. Domain II-A)

An introduction to the discipline of statistics, emphasizing both statistical thinking and analysis of real-world data. Topics include sampling, organizing and exploring data, probability distributions such as the normal distribution, sampling distributions, hypothesis testing and confidence intervals, and correlation and regression. Emphasis is placed on the analysis of collected data in order to apply an appropriate inferential test. Appropriate statistical software is explored. This course includes an additional a one-hour per week lecture recitation. Topics may vary by section at the discretion of the instructor with the goal of supporting students' readiness for, and success, in the lecture course. Note: Students may not receive credit for both this course and STAA 127 Statistics for Social Sciences, STAT 107 Business Statistics, STAT 157 Probability and Statistics, or STAT 203 Statistics for the Natural Sciences.

## STAT 157 Probability and Statistics (Gen. Ed. Domain II-A)

A thorough introduction to probability and statistics. After a brief survey of descriptive statistics, topics include counting techniques, discrete and continuous probability distributions, Bayes' rule, correlation and regression, confidence intervals, sampling distributions, the Central Limit Theorem, and hypothesis testing. Note: Students may not receive credit for both this course and STAA 127 Statistics for Social Sciences, STAT 107 Business Statistics or STAT 117 Introduction to Statistics or STAT 208 Statistics for the Natural Sciences.
Prerequisite: Eligibility to enroll in MATH 180 Precalculus.

## STAT 203 Statistics for the Natural Sciences (Gen. Ed. Domain II-A)

A thorough introduction to the application of statistics to the sciences. Topics include a brief introduction to the appropriate descriptive statistics, relevant probability distributions, and a heavy focus on regression and hypothesis testing, including t-tests, chi-square tests for categorical data, and analysis of variance. Emphasis is placed on the analysis of data in order to apply an appropriate inferential test. Appropriate statistical software is employed. Note: Students may not receive credit for both this course and STAA 127 Statistics for the Social Sciences, STAT 107 Business Statistics, STAT 117 Introduction to Statistics, or STAT 157 Probability and Statistics.
Prerequisite: A grade of C (2.00) or higher in MATH 123 Introduction to Functions or the eligibility to enroll in MATH 180 Precalculus.

## STAT 307 Intermediate Statistics

A study of regression and correlation analysis, chi square tests and contingency tables, design of experiments, analysis of variance, non-parametric statistics, and introduction to data analysis.
Prerequisite: One (1) of the following: ENVS 202 Data Analysis for Scientists, QUAN 202 Statistical Analysis for Business and Economics, STAT 107 Business Statistics, STAT 117 Introduction to Statistics, STAT 157 Probability and Statistics, STAT 203 Statistics for the Natural Sciences.

## STAT 308 Applied Statistical Data Processing

Practical aspects of data analysis using statistical computer packages such as MINITAB, SPSSX, AND BMDP. Multivariate statistical methods including multiple regression, analysis of covariance, factor analysis, multidimensional scaling, discriminant analysis and linear models for cross-classified categorical data are emphasized. Students do individual data analysis projects.
Prerequisite: STAT 307 Intermediate Statistics.

## STAT 341 Mathematical Statistics I

A rigorous study of sample spaces, events as subsets of a sample space, probability axioms, combinatorics applied to probability problems, random variables and their distributions, special distributions, multivariate distributions, central limit theorem, and topics in statistical inference. Note: Students cannot receive credit for both this course and MATH 348 Mathematical Statistics I. Prerequisites: MATH 206 Discrete Mathematics I and MATH 221 Calculus III.

## STAT 342 Mathematical Statistics II

A rigorous study of estimation, decision theory and hypotheses testing, linear models, regression, analysis of variance, analysis of categorical data, and nonparametric inference. Note: Students cannot receive credit for both this course and MATH 349 Mathematical Statistics II. Prerequisite: STAT 341 Mathematical Statistics I.

## STUDIO ART COURSES

## ARTS 110 Introduction to Drawing (Gen. Ed. Domain I-A)

A basic course in drawing fundamentals specifically designed to facilitate the development of drawing skills for students who are not art majors. This course does not satisfy the Art major requirement. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 111 Introduction to Sculpture (Gen. Ed. Domain I-A)

A beginning course designed to introduce students to sculpture. The course is designed to provide basic skills in working in three dimensions and interpreting the world creatively into physical form. A variety of materials are explored. No previous experience with sculpture is needed. This course may only count as a free elective for Studio Art majors. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 120 Introduction to Painting (Gen. Ed. Domain I-A)

A beginning course in painting designed for non-majors. Emphasis is on development of basic skills in visual expression. Some previous drawing experience is helpful. This course does not satisfy the Art major requirement. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 140 Introduction to Graphic Design (Gen. Ed. Domain I-A)

An introduction to the tools and concepts used to create contemporary graphic design experiences for relevant audiences, for example creating a résumé, developing an infographic for a presentation, or building a business plan for a start-up company. Students build a foundation of basic skills through layout, color theory, grids, typography, and motion and learn to apply them through logos, posters, screen-based design, and more. Skills for designing are learned through sketching by hand as well as with the latest digital design tools. This course may only count as a free elective for Studio Arts majors. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 167 Introduction to Studio Art (Gen. Ed. Domain I-A)

A beginning course for students with little or no prior art experience. The course explores the fundamental concepts of visual art through projects in various two- and three-dimensional media. The emphasis is on participation, effort, and sensitivity to the principles of visual organization. Studio exercises are supplemented by slides, lectures, and discussion. This course does not satisfy the Art major requirement. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 168 Introduction to Animation (Gen. Ed. Domain I-A)

An introduction to the fundamental principles and techniques of animation. Students learn and develop skills with traditional and computer media, including image creation and manipulation, character illustration, story development and narrative sequence, stop-action, and motion graphics. Animation production can be applied to presentations, web sites, portfolios, social media platforms, marketing and branding, and a variety of art and design projects. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 188 Introduction to Photography: Black and White (Gen. Ed. Domain I-A)

An introduction to the basic concepts and techniques used in digital single-lens reflex (DSLR) photography. These concepts include, but are not limited to, motion, lighting, framing, vantage point, and composition. Through group critiques and individual instruction, students develop an understanding of photography as a practice/process, explore the aesthetics and techniques of black and white photography, inkjet printing, and begin building the foundation of a strong photographic portfolio. Throughout the course, students utilize photo imaging software to prepare file sizes and enhance their black and white photographs. Note: Students cannot receive credit for both this course and either ARTS 208 Basic Photography or COMM 208 Basic Photography. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 200 Drawing Fundamentals

An introduction to the basic concepts and techniques used in drawing. These concepts include, but are not limited to, linear perspective, figure/ground relationships, and composition. Students acquire skills in modeling forms and creating more expressive drawings using a variety of media including pencil, charcoal, and ink. Through group critiques and individual instruction, students develop an understanding of drawing as a practice/process and begin building the foundation of a strong portfolio. Note: Students cannot receive credit for both this course and ARTS 211 Drawing I. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 203 Form and Structure

An examination of how form and structure can be used to express content visually in three dimensions. Foundational design concepts including volume, weight, texture, modularity, materiality, and scale are integral to this hands-on studio class. Various materials are introduced. Emphasis is placed upon the student's ability to conceive three-dimensional forms and execute them skillfully in space. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 205 Photography of Architecture (Gen. Ed. Domain I-A)

A study of the representation of architecture through the medium of photography. Students learn the principles and techniques of Digital Single-Lens Reflex (DSLR) camera operation that document regional architecture, and creatively explore three-dimensional spaces. The study of important examples of architecture in Eastern Massachusetts is emphasized. Coursework involves both field photography and research. Note: Students cannot receive credit for both this course and either ARTS 272 Photography and Architecture or COMM 272 Photography and Architecture. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 213 Time and Space

An examination of the fundamental principles of time-based media through a survey of concepts, techniques, and technological practices. Students explore temporal issues including still and moving image, sound and image, and sequential narrative through spatial, tactile, and digital approaches. Lecture and discussion sessions introduce historical and contemporary application of time and motion, the ephemeral, and performance. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 216 Interactive Design

The study of concepts and techniques using a variety of software programs in the design of websites and interactive multimedia. Projects include web layout and the development of interface and interaction design on the computer. Students develop skills with flowcharting, storyboarding, scripting, and interactive design basics such as screen design, optimizing images, and working with color and type. Note: Students cannot receive credit for both this course and COMM 225 Interactive Design. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 230 Digital Tools for Art and Design, or ARTS 361 Typography, or permission of the instructor.

## ARTS 222 Color and Design

An examination of the language of visual communication, focusing on the principles of design. Students explore line, shape, form, value, texture, color, and space in relation to various compositional strategies. Lecture and discussion sessions introduce historical and contemporary theories of two-dimensional design. Note: Students cannot receive credit for both this course and ARTS 202 Two-Dimensional Design. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 230 Digital Tools for Art and Design

An introduction to digital skill development in the creative processes of Studio Art. Emphasis is placed on the application of digital skills in relation to the hands-on nature of studio art practices necessary for fine artists, designers, and art educators. Topics may include: preparing images for a gallery brochure, building a promotional artist's website, creating storyboards for an illustrated book, creating digital art based on traditional hand rendering/building techniques, or developing a course syllabus for teaching art. Students in this course build upon art and design principles (scale, form, contrast, line, and negative space) and apply these principles through digital means such as creative software programs, scanning, and digital image-making. Building, drawing, and creating by hand are also key aspects of the course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Open to non-studio art majors.

## ARTS 246 Printmaking (Gen. Ed. Domain I-A)

An introduction to various printmaking techniques, including silkscreen, monotype, relief, drypoint, etching, and collograph. Students explore a range of approaches as they create images that are printed as unique works, multiples, and variations. Coursework encourages students to experiment in print media while thinking critically and creatively. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 235 Intermediate Photography: Color

An examination of the creation and production of color photographic images. Students explore color theory and design, photographic techniques, and personal vision. Students acquire the ability to edit, print, and critique photographic work based upon a developed aesthetic of color. Lecture and discussion sessions introduce historical and contemporary theories related to color photography. Students must have access to their own digital single-lens reflex (DSLR) camera for use in this course. Note: Students cannot receive credit for both this course and either ARTS 306 Intermediate Photography or COMM 315 Intermediate Photography. Students who have successfully completed COMM 208 Basic Photography are eligible to take ARTS 235 Intermediate Photography: Color. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 188 Introduction to Photography: Black and White or permission of the instructor.

## ARTS 241 Ceramics (Gen. Ed. Domain I-A)

An introduction to basic techniques in both handbuilding and wheel-working. Students begin to explore ways to make their work more personal by combining technical skills with form and concept. Emphasis is placed upon the student's ability to conceive three-dimensional forms and execute them skillfully in space. Various methods of glazing and firing are addressed as they relate to student work on specific projects. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 242 Silkscreen

An introduction to silkscreen processes and techniques, including traditional applications and contemporary printing techniques. Students explore a wide range of visual approaches including paper stencil, stop-out, drawing fluid, and photo-emulsion. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: Any one of the following: ARTS 110 Introduction to Drawing, ARTS 120 Introduction to Painting, ARTS 167 Introduction to Studio Art, ARTS 200 Drawing Fundamentals, or ARTS 222 Color and Design; or permission of the instructor.

## ARTS 254 Painting Methods

An introductory course designed to strengthen the students' awareness of the history and techniques of the craft of painting while exposing students to contemporary styles and ideas about visual art production. This course is meant to aid in the development of the students' technical and observational skills. Students concentrate on the essential elements of painting, its materials, methods and craft. The structure of this course is centralized around a series of exercises that prepare students for higher levels of problem solving, increase their self-discipline, and develop an understanding of the articulation of brushwork, composition and color. Note: Students may not receive credit for both ARTS 221 Painting I and ARTS 254 Painting Methods. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 200 Drawing Fundamentals or permission of the instructor.

## ARTS 266 Wheelworking

An intensive introduction to working on the potter's wheel. Students learn the basic techniques of centering, opening and raising the walls of pots. Once familiar with these techniques, students learn how to create such functional objects as plates, bowls, mugs, teapots and other lidded vessels. The wheel is also considered as a tool for making more sculptural works. While being exposed to a full range of historical and contemporary pottery, students develop a personal sense of material, form, and design along with methods of glazing and firing. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 241 Ceramics or ARTS 203 Form and Structure, or permission of the instructor.

## ARTS 290 Study Tour: Art \& Architecture (Gen. Ed. Domain I-A)

A studio art course taught through an extensive field trip or series of field trips, in addition to more traditional methods of teaching. Students gain direct experience of art and architecture in historic, social, and geographic contexts. The topics/locations may vary from year to year and are announced in the course schedule bulletin. This course, in a different topic/location, may be repeated for credit. Additional course fees apply. Location to be announced when offered. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

## ARTS 300 Life Drawing

An examination of the human figure as subject matter. Drawing from live models, students develop an understanding of the basic anatomy and proportions of the human form in order to render it accurately. The second half of the course addresses the expressive and conceptual possibilities of life drawing. Note: Students cannot receive credit for both this course and ARTS 312 Drawing II. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

Prerequisite: ARTS 200 Drawing Fundamentals.

## ARTS 307 Functional Ceramics

An exploration of the creative possibilities within studio production ceramics. Emphasis is on the design and fabrication of a complete dinnerware set. Additional smaller sets of various types are also assigned. Students work with appropriate glazing and firing methods for functional ceramics. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

Prerequisite: ARTS 241 Ceramics or ARTS 266 Wheelworking.

## ARTS 308 Woodcut

A study of woodblock relief printing techniques including black and white, reduction, multi-block, jigsaw, monotype/monoprint, and mixed media manipulation. Students explore the creative possibilities of the medium by developing a portfolio of color and black and white woodcuts. Note: Students may not receive credit for both ARTS 308 and 11.263 Woodcut. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 200 Drawing Fundamentals.

## ARTS 313 Sculpture Methods and Materials

A sculpture course designed to introduce students to fundamental sculptural methods and materials. The course provides students with a broad overview of sculptural modalities; and experience using materials to create three-dimensional visual form in the service of expressing content. Material applications covered include planar construction with wood; tactile manipulation of wet materials; casting with rubber and plaster; and experimentation with non-traditional materials. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 203 Form and Structure or permission of the instructor.

## ARTS 315 Collage and Mixed Media

An exploration into the many creative possibilities of collage and mixed media within the constellation of painting practice. Students research a wide range of techniques, materials and supports. The application of collage and mixed media by both modern and contemporary artists is examined in detail. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 254 Painting Methods.

## ARTS 316 Advanced Interactive Design

An advanced study of interactive digital media. Students evaluate contemporary trends and production techniques while creating professional projects on the computer. Students build skills using the latest interactive technologies and develop stronger aesthetic sensibilities. Discussion and production of multimedia structural elements, user-interfaces, and scripting are an integral part of the course. Note: Students cannot receive credit for both this course and COMM 316 Advanced Interactive Design. Students who have successfully completed COMM 225 Interactive Design are eligible to take this course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 216 Interactive Design or permission of the instructor.

## ARTS 324 Image and Clay

An investigation of the intersection between two-dimensional drawn and/or printed imagery and three-dimensional ceramic forms. Conceptual ideas of incorporating experimental imagery on the surface of functional and sculptural ceramic objects in relation to the contemporary field of ceramic discourse are examined. Techniques such as screen-printing, embossing, lithography, glaze pencil drawing, and decals are covered. Students explore advanced-level glazing and firing techniques appropriate to individual interests and research. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 241 Ceramics.

## ARTS 328 Intaglio

A study of intaglio printmaking techniques including drypoint, engraving, mezzotint, etching, aquatint, sugarlift, open bite, spit bite, and single and multiplate color printing. Students explore the creative possibilities of these techniques and develop a portfolio of color and black and white intaglio prints. Note: Students may not receive credit for both this course and 11.268 Intaglio. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 200 Drawing Fundamentals.

## ARTS 333 Motion Graphics and Animation

The study of concepts and techniques using a variety of software, focused on the creation of moving images and 2-D animated graphics. Students research, view, and evaluate contemporary trends and production techniques while creating professional projects that incorporate motion graphic skills. Assignments range from animating visual elements for web sites, including logo introductions, to working with kinetic typography in relation to narrative sequencing. Students gain experience with storyboards, scripts, digital audio, and the compositing of video, photos, and graphics while using the latest technologies and developing stronger aesthetic sensibilities. Note: Students cannot receive credit for both this course and COMM 327 Motion Graphics and Animation. Students who have successfully completed COMM 200 Design for Integrated Media are eligible to take this course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 230 Digital Tools for Art and Design, or permission of the instructor.

## ARTS 335 Principles of User Experience Design

An introduction to the essential practice of user-centered design. Creating a product, launching a website or mobile application, managing a retail store, or offering any service requires an in-depth knowledge of clients and customers. User Experience Design (UX) is the bridge between design and a range of fields such as business, computer science, and sociology. Students learn the latest user testing methodologies and design research. These methods are applied to the design of websites, mobile applications, packaging design, and a range of services and experiences for customers. Current and emerging technologies are introduced. Basic sketching, by hand and digitally, are covered in the course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 140 Introduction to Graphic Design or ARTS 230 Digital Tools for Art and Design.

## ARTS 344 Digital Painting

An exploration of the tools and techniques used in creating digital paintings, including the relationship between digital and painting/drawing skills. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisites: ARTS 230 Digital Tools for Art and Design; or permission of the instructor.

## ARTS 351 Watercolor

An intermediate-level course which focuses on strengthening the students' awareness of the history and techniques of watercolor and gouache while exposing students to contemporary styles and ideas about these media and aiding in the development of the students' conceptual, technical and observational skills. Students concentrate on the essential elements of these media and their materials, methods, and craft. Note: Students may not receive credit for both ARTS 250 Watercolor and ARTS 351 Watercolor. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 254 Painting Methods.

## ARTS 354 Painting Composition

An intermediate-level course that focuses on the applied study of pictorial manipulation through color and design principles. The primary goal is to strengthen the students' awareness of the history and techniques of the craft of painting while exposing the students to contemporary styles and ideas about painting. It is designed to aid in the development of skills in dealing with color, form and concept. Note: Students may not receive credit for both ARTS 322 Painting II and ARTS 354 Painting Composition. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 254 Painting Methods.

## ARTS 356 Illustration

An introduction to the practical application of drawing and painting in communication design and narrative. Students employ a variety of materials used in magazine, book, and product illustrations, including pen and ink, watercolor, and dry drawing media. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisite: ARTS 200 Drawing Fundamentals.

## ARTS 358 Landscape Painting

An opportunity for the student to work within the rich and complex tradition of landscape painting, working from observation on location and in the studio. Students explore issues that affect the environment and look at the artists who tackle the subject of the landscape from a critical perspective. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 354 Painting Composition.

## ARTS 360 Ceramic Sculpture

An exploration of conceptual ideas in ceramic sculpture and installation, with the inclusion of mixed media innovations. Advanced level hand building, mold making, casting, firing, and screen-printing techniques are employed, as each student works towards a body of artwork that is inventive in terms of material use. The course emphasizes clay as a material for conceptually derived forms that push the relatedness of expression, experience, and personal artistic coordinates. Engagement with the field of contemporary ceramics and professional practices are also covered in relation to conceptual interests. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 241 Ceramics or permission of the instructor.

## ARTS 361 Typography

An introduction to the concepts and principles of typography. Students explore both the informational and expressive aspects of type. Word and image studies that explore space, color, hierarchy, scale, and grid systems are taught in combination with projects that offer students the opportunity to solve design challenges for the screen, printed materials, or three-dimensional applications. Students build skills through hands-on projects as well as through design software. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: ARTS 140 Introduction to Graphic Design or ARTS 230 Digital Tools for Art and Design.

## ARTS 363 Photojournalism and Digital Narrative

A studio course that explores the use of the photographic image in narrative, documentary, and editorial form. Lectures, critiques, and assignments provide students with the opportunity to explore traditional photojournalistic methods as well as contemporary approaches to visual storytelling. In addition to weekly shooting assignments, students complete an in-depth photo story using their own images and text. Students must have access to their own digital single-lens reflex (DSLR) camera for use in this course. Note: Students cannot receive credit for both this course and COMM 360 Photojournalism. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: One (1) 200-level photography class or permission of the instructor.

## ARTS 366 Branding and Identity Design

An intermediate-level Graphic Design course that prepares students to design visual identities across a variety of media as well as to articulate the importance of building a substantial brand. Topics include logo design, and designing for mobile devices, websites, packaging, signage, and more. Case studies, semiotic methods, and group activities are utilized as a means to analyze the role of words and images in dynamic contemporary contexts and offer students the tools needed to design for various scenarios. Formal skills are strengthened through sketching by hand and working with the latest digital design tools. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 230 Digital Tools for Art and Design.

## ARTS 369 Figure Painting

An intermediate-level painting course designed for students who wish to explore various ways to incorporate the human figure into their studio practice. This course fosters the student's ability to work conceptually, employing experimentation with various idioms to promote an understanding of contemporary and critical issues in painting. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 354 Painting Composition.

## ARTS 377 Abstract Painting

An exploration of Abstraction through the discipline of painting. Topics may include organic abstraction, geometric abstraction, and non-objective imagery. The course emphasizes the position, importance and meaning of abstract painting in contemporary art and examines the Modernist tradition of abstraction as it developed throughout the twentieth century. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 354 Painting Composition.

## ARTS 386 Sequential Illustration

An intermediate-level course that focuses on the issues of sequential image-making in the areas of children's books, comics, and graphic novels. Students are exposed to a variety of media and techniques while exploring storytelling, pacing, composition, character design, and the interaction of text and image. Additional topics include the development of a personal vision/voice and illustrating for a particular audience. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 200 Drawing Fundamentals or ARTS 110 Introduction to Drawing; or permission of instructor.

## ARTS 394 Encaustic

An introduction to the seductive ancient painting technique of encaustic, a process where pigmented wax is fused to a painting surface by the means of heat. This type of painting is recognized for its visually resplendent surface and rich color, and has seen a resurgence in the past decade. Students explore the process involved in creating the translucent, luminous, and textured surfaces that can only be achieved through encaustic. Various approaches to working in this versatile and exciting medium are offered, including working on various grounds, collage, incising, extreme impasto, and layering. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 354 Painting Composition or permission of instructor.

## ARTS 403 Advanced Sculpture Studio

Designed to deepen and broaden students' exposure to and understanding of sculptural materials, methods, and conceptual frameworks. Advanced material applications include advanced casting, building complex understructures, and 3D digital modelling. The course also explores the expanded field of sculpture, which includes performance, social sculpture, and installation. One-on-one technical instruction guided by student's interests plays an integral role in this advanced course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.

Prerequisite: ARTS 313 Sculpture Methods and Materials, or permission of the instructor.

## ARTS 416 Advanced Ceramics Studio

Designed for those interested in expanding their ceramics experience while exploring more complex concepts and methods in ceramics. Each student creates a separate body of work for each of four themes, as determined by the instructor. Emphasis is on experimentation in design and construction as well as professional challenge. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: Two of the following ceramics courses: ARTS 241 Ceramics, ARTS 266 Wheelworking, or ARTS 307 Functional Ceramics.

## ARTS 419 Advanced Drawing Studio

An advanced drawing workshop in which students are encouraged to develop themes and explore stylistic possibilities. Emphasis is placed upon conceptual problem solving and experimental approaches to the process of drawing. Students are encouraged to consider visual issues such as dramatic scale, serial imagery, and media usage. Students work with still life, the human figure, and non-objective forms in pursuing a more individualistic connection with drawing. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 300 Life Drawing.

## ARTS 431 Advanced Graphic Design

An advanced-level Graphic Design course that synthesizes design thinking skills and formal designmaking skills. Students explore how their skills can be applied to real world challenges and look at design beyond the creation of objects, understanding its potential impact on society. Open only to Studio Art majors with a concentration in Graphic Design. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisite: ARTS 361 Typography and ARTS 366 Branding and Identity Design.

## ARTS 441 Advanced Photography

An exploration into contemporary photographic practices. Photography today may incorporate a multitude of working methodologies that borrow from collage, montage, printmaking, and digital media; therefore, experimentation with differing media and hybrids in other areas may be explored. Students work towards creating a consistent and thematic portfolio. Students also research the works of contemporary artists to expand the depth and potency of their visual expression. Students must have access to their own DSLR cameras for use in this course. Note: Students cannot receive credit for both this course and COMM 330 Advanced Photography nor ARTS 323 Advanced Photography. Students who have successfully completed COMM 315 Intermediate Photography are eligible to take this advanced course. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: ARTS 235 Intermediate Photography: Color, and two (2) additional courses from the Photography Concentration's ARTS electives group, or permission of the instructor.

## ARTS 456 Advanced Illustration

An advanced study of illustration techniques and conceptual approaches. Students utilize research and media experimentation to expand the depth and potency of their personal visual voices. Projects allow students to develop work in a specific area of the illustration marketplace. Students define the framework for their senior portfolios. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: ARTS 356 Illustration.

## ARTS 473 Special Topics in Studio Art

A topics course in a specified studio area designed for art majors. The course gives the art student experiences to enhance artistic, conceptual, and professional development. Current issues in art are addressed as they relate to the students' work. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisites: Four studio art courses and two art history courses.

## ARTS 478 Advanced Painting

An exploration into subject, meaning, and content as it relates to individual concepts and personal expression in the discipline of painting. The structure of this course is self-directed studio practice overseen by the instructor. In this course, the student is expected to work towards creating a consistent and conceptually sound body of work. Painting, as a discipline, often employs methods of production that go far beyond the brush. Painting today may incorporate a multitude of working methodologies that borrow from sculpture, photography, printmaking and digital media; therefore, experimentation with differing media and hybrids in other areas may be explored. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisites: ARTS 354 Painting Composition and two (2) additional intermediate-level painting courses.

## ARTS 479 Topics in Advanced Printmaking

An exploration of a specific genre or topic in the printmaking/book arts discipline. The course is designed to enhance the creative, conceptual, and professional development of printmaking majors. Students work toward developing a body of work with emphasis on content and technique. Regular critique helps students develop the critical language necessary to speak about their work on a variety of levels. Contemporary issues in printmaking are addressed, particularly as they relate to students' work. This course, on a different topic, may be repeated for credit. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction.
Prerequisite: One 300-level printmaking course or permission of the instructor.

## ARTS 487 Senior Studio Art Seminar

A capstone course for studio art majors. The seminar enables each participant to develop a cohesive body of work for a senior portfolio review by the entire studio art faculty. Pre-professional consultation and workshops provide information concerning graduate programs, art galleries, competitions and art funding sources. Students write artist statements, cover letters, and grant proposals. Students learn how to organize their portfolios and resumes and document their work through photography. Students explore digital imaging and Web site design as appropriate to their concentration. Through field trips to commercial galleries, museums and alternative exhibition spaces as well as presentations by guest art professionals, students address issues of art and commerce. Students also research historical and contemporary work related to their own work and establish dialogue with fellow art majors in other concentrations. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisites: Art major with all core requirements for the major completed, and senior standing.

## ARTS 488 Senior Portfolio: Graphic Design and Illustration

An advanced course in which students create an entry-level portfolio for professional work in graphic design or illustration. Through exercises and activities that help determine professional goals, students create individual project plans for the semester with the benefit of regular group critiques. The course culminates with a public exhibition in the University gallery space and a review of the finished portfolio by a group of design professionals. NOTE: Open only to Studio Art majors with a concentration in Graphic Design or Illustration. Note: This course meets for six (6) hours per week, consisting of four (4) hours of lecture/critique and two (2) hours of studio instruction. Prerequisite: ARTS 431 Advanced Graphic Design or ARTS 456 Advanced Illustration.

## ARTS 490 Independent Study in Studio Art

An Art major or minor with demonstrated ability may pursue a project or subject area of their own interest, under the guidance of a member of the Art Department faculty. The student must submit a written proposal to the faculty member who has agreed to be the advisor. A student may take more than one independent study. Limited to juniors and seniors.

## ARTS 495 Internship in Studio Art

A supervised experience in a field study situation which complements the student's course work. The internship program is offered through cooperation of participating institutions which provide professional guidance for the interns. Any student who wishes to participate in the internship must consult with the Art Department Internship Coordinator not later than the middle of the semester prior to beginning of the internship.
Prerequisite: Junior and senior art majors who have a GPA of no less than 2.50 in their major.

## WASHINGTON CENTER COURSES

## OCST 490 Washington Center Course (Independent Study)

An opportunity for a student to select a special topic course offered and taught by the Washington Center. Prior approval of the topic from the student's major department chair is required. The student supplements the in-person classes through readings, lectures, guest speakers, and site visits. Additional assignments over and above the Washington Center requirements are required by the student's major department chair.
Prerequisites: Approved enrollment in OCST 495 Internship in Washington and permission of major department chair.

OCST 495 Semester Internship in Washington D.C. (Three Course-Credits)
An internship program in Washington D.C. The work placements integrate practical knowledge with theory. Tailored learning experiences sponsored by the Washington Center are specific to students' unique talents, career objectives and major, and are selected in consultation with department supervisor. Course requirements are determined by the major department chair.
Prerequisites: 2.50 GPA , permission of major department chair, and Junior standing.

## GENERAL EDUCATION REQUIREMENTS

## Mission Statement

General Education complements your major's academic work by fostering curiosity and helping you develop a broad range of interests as you explore courses and concepts across disciplines. By thinking about current issues through diverse disciplinary lenses, you will have the opportunity to develop the intellectual versatility required for all twenty-first century careers, as well as personal enrichment and self-awareness.
General Education at Framingham State is designed so that you, our students, can do the following:

- Build a breadth of knowledge across numerous academic disciplines
- Explore majors and minors
- Investigate current issues, especially equity and the ongoing antiracism movement, from different angles alongside your instructors and peers
- Develop skills for employability in a dynamic job market


## Domain General Education Requirements

To fulfill the General Education requirement, students must complete 10 course-credits. Courses are listed as either a Core requirement or under each of three domains, with eight general education subdomains. Courses taken in the General Education subdomains must be taken outside of the student's major department. Students are not allowed to substitute nongeneral education courses for general education credit.
Each Domain is designed to emphasize different modes of thinking and problem solving. Students may choose courses from several departments within each domain. Students are additionally encouraged to consider following optional "Pathways" through the General Education program. Pathways are three or more courses linked by theme or subject that may set students up for a related minor with little additional coursework. Students should consult with their academic advisors to choose courses and potential Pathways that best match their interests and aims.

The General Education requirement is designed to help students achieve the following learning objectives.

## Domain General Education Learning Objectives

## Overarching Learning Objective: Solve Problems Using Critical Thinking

Students will demonstrate the ability to:

- Identify a problem, question, or issue;
- Evaluate the relevance of available information, data, evidence, or resources;
- Analyze or apply available information, data, evidence, or resources to generate meaning;
- Present conclusions, artifacts, or summary based on reflective consideration of applicable information, data, evidence, or resources.


## Learning Objective 1: Communicate Effectively Orally

Students will demonstrate the ability to:

- Deliver an organized presentation to an audience that clearly conveys main ideas and incorporates contextual information;
- Deliver a message with appropriate grammar and clear articulation;
- Engage the audience using appropriate non-verbal communication techniques, such as gesture, facial expression, and/or tone of voice.


## Learning Objective 2: Communicate Effectively in Writing

Students will demonstrate the ability to:

- Effectively convey a point or idea;
- Develop the point or idea with strategies appropriate to the discipline;
- Use a voice and style suited to the audience and purpose;
- Follow the structure and conventions appropriate to writing in a specific genre or discipline;
- Write clearly and grammatically.


## Learning Objective 3: Solve Problems Using Quantitative Thinking

Students will demonstrate the ability to:

- Identify the quantity of a property, attribute, or quality (e.g., length, age, salary, population);
- Represent quantity numerically, symbolically, or graphically;
- Describe similarities and differences in quantity numerically, symbolically, graphically, or using words;
- Recognize, describe, or interpret relationships and patterns among the quantities of different properties, attributes, or qualities.


## Learning Objective 4: Demonstrate a Critical Understanding of Human Diversity

Students will demonstrate the ability to:

- Demonstrate knowledge of the perspectives and life experiences of people from diverse groups and cultures;
- Articulate how an individual's own cultural background and experiences shape that person's own sense of identity;
- Articulate how an individual's own cultural background and experiences shape that person's ideas about, perceptions of, and interactions and relationships with people from other groups and cultures;
- Demonstrate an understanding of ways in which contributions by people from different cultures and groups contribute to individual or institutional enhancement and growth.


## Learning Objective 5: Civic Literacy

Students will demonstrate the ability to:

- Describe formal and informal structures and processes of one or more systems of governance;
- Identify formal and informal ways in which individuals or groups participate/have participated in political processes and barriers to that participation;
- Critically analyze the local, national, and/or global implications of historical and contemporary civic actions and decision-making.


## Learning Objective 6: Recognize Ethical and Social Responsibilities

Students will demonstrate the ability to:

- Identify ways in which individual and institutional decisions and actions affect the world;
- Evaluate the positive or negative implications of a particular decision or action on various groups or environments;
- Apply such evaluations to their own decision-making processes such that positive outcomes are maximized and negative consequences are minimized.


## Learning Objective 7: Locate, Evaluate and Apply Information

Students will demonstrate the ability to:

- Access relevant information;
- Critically evaluate sources and types of information in terms of their merits and appropriateness in a given context;
- Apply information effectively to support and/or refute a position;
- Use information ethically and legally.


## Learning Objective 8: Solve Problems Using Creative Thinking

Students will demonstrate the ability to:

- Produce a creative work or solution based on familiarity with current and/or historical modes of creative expression or traditional methods of problem solving;
- Express an idea or emotion through the production of a creative work or solution;
- Present, explain, and/or defend the creative work and/or process by which it was created.


## Learning Objective 9: Demonstrate Technological Competency

Students will demonstrate the ability to:

- Identify the functions of computer applications, which may include word processors, spreadsheets, databases, and/or presentation software;
- Apply appropriate computer applications to complete a task.


## Learning Objective 10: Work Collaboratively and Independently

Students will demonstrate the ability to:

- Make a substantive individual contribution to a product created by a group;
- Work with others to integrate individual contributions into a cohesive final product.


## Domain General Education and Major Requirements

In all majors, where upon completion of all requirements a degree is awarded, one general education subdomain is considered satisfied through completion of the major program requirements. One exception to this is the major in Liberal Studies, where completion of all subdomains is required.

| Completing a major in: | Subdomain fulfilled: |
| :---: | :---: |
| Accounting | II-A |
| American Sign Language | I-C |
| Art History | I-B |
| Biochemistry | II-B |
| Biology | II-B |
| Biotechnology | II-B |
| Business \& Information Technology | II-A |
| Chemistry | II-B |
| Child and Family Studies | III-C |
| Communication Arts | I-B |
| Computer Science | II-A |
| Criminology | II-A |
| Early Childhood Education | Frameworks |
| Economics | II-A |
| Elementary Education | Frameworks |
| English | I-B |
| Environmental Studies \& Social Justice | III-C |
| Environmental Sciences | II-B |
| Fashion Design | III-C |
| Fashion Merchandising | III-C |
| Finance | III-C |
| Food \& Nutrition | II-B |
| Food Science | II-B |
| Geospatial \& Data Analysis | III-C |
| Global Studies | III-C |
| Health \& Wellness | II-B |
| History | III-A |
| Hospitality \& Tourism Management | III-C |
| International Business | II-A |
| Management | II-A |
| Marketing | III-C |
| Mathematics | II-A |
| Nursing | II-B |
| Political Science | III-C |
| Pre-Medicine \&Human Health | II-B |
| Pre-Veterinary Medicine | II-B |
| Psychology | III-B |
| Sociology | II-A |
| Spanish | I-C |
| Sports Management | III-C |
| Studio Art | I-A |
| Wildlife and Environmental Biology | II-B |
| World Languages \& Linguistics | I-C |

## DOMAIN GENERAL EDUCATION

## Common Core Requirements Two (2) Course-Credits Required

- ENWR 110 Composition II
- MATH xxx College-Level Mathematics Course

Any course used to fulfill this requirement cannot be used to fill any other General Education Requirement. Note: A 200-level mathematics courses that is not General Education may be used to satisfy this requirement.
Notes about Courses in the Common Core

- Writing: The Common Core writing requirement must be completed within the first year of matriculating at the university.
- Math: The specific core math course students must take will be dependent on major requirements. This requirement must be completed within the first two years of matriculating at the university.


## Domain I

Three (3) Course-Credits Required
The study of representations of human experience.
A. One (1) course in Creative Arts

The study of creative expression through the practice of artistic problem solving.
ARTS 110 Introduction to Drawing
ARTS 111 Introduction to Sculpture
ARTS 120 Introduction to Painting
ARTS 140 Introduction to Graphic Design
ARTS 167 Introduction to Studio Art
ARTS 168 Introduction to Animation
ARTS 188 Introduction to Photography: Black and White
ARTS 205 Photography of Architecture
ARTS 241 Ceramics
ARTS 246 Printmaking
ARTS 290 Study Tour: Art \& Architecture
COMM 107 Effective Speaking
COMM 214 Introduction to Acting
COMM 226 Writing for Visual Media
COMM 262 Television Studio Production
COMM 280 Introduction to Film Production
CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 140 Introduction to the Internet, Graphics, and Multimedia
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
MUSC 222 Music Technology and Production I
MUSC 280 Performative Exploration of Music
RAMS 103EN First-Year Seminar: Creative Thinking through Creative
B. One (1) course in Humanities

The study of artistic, literary, and philosophical works through analysis and interpretation.

ARTH 160 Introduction to the World of Art
ARTH 222 Sex, Drugs, and Suicides: The Artist in Popular Culture
ARTH 226 History of Photography
ARTH 273 Modern Art History
ARTH 282 American Art
ARTH 290 Study Tour: Art \& Architecture
CHIN 118 Chinese Writing System and Calligraphy
COMM 130 Visual Communication

COMM 201 Oral Interpretation of Literature
COMM 259 African Americans in Television and Radio
ENGL 111 Reading Literature
ENGL 118 Monsters
ENGL 132 Alternate Pasts
ENGL 150 Rebels and Revolution
ENGL 186 Banned Books
ENGL 201 Mythology and Folklore
ENGL 207 The Language of Film
ENGL 220 Shakespeare
ENGL 228 Disability in Literature
ENGL 232 Irish Literature
ENGL 233 American Multi-Ethnic Young Adult Fiction
ENGL 238 Environmental Literature
ENGL 242 The Graphic Novel
ENGL 243 The American Short Story
ENGL 261 American Writers I
ENGL 262 American Writers II
ENGL 275 Contemporary Latinx Literature
HSTY 120 American Lives
HSTY 123 Beasts, Battles, and Ballads: Life, Literature, and Art in Medieval Europe
MUSC 121 Music Appreciation
MUSC 136 Pathways to Musical Understanding
MUSC 141 American Musics
MUSC 248 History of Rock Music to the 1970s
MUSC 275 History of Rock Music from the 1970s to Today
PHIL 101 Invitation to Philosophy
PHIL 118 Introduction to Philosophy of Science
RAMS 102ED First-Year Seminar: Education on Page and Screen
RAMS 101EN First-Year Seminar: Explorations in Literature
RAMS 103HI First-Year Seminar: Topics in Cultural History
RAMS 102PH First-Year Seminar: Philosophy
C. One (1) Language course

The study of language in its cultural contexts.

## Notes about Courses in this Domain

- Language: Students should consult the World Language section of Placement testing to determine which course they are eligible to enroll it.

ASGN 101 American Sign Language I
ASGN 102 American Sign Language II
CHIN 101 Elementary Chinese I
CHIN 102 Elementary Chinese II
CHIN 201 Intermediate Chinese I
CHIN 202 Intermediate Chinese II
FREN 101 Elementary French I
FREN 102 Elementary French II
FREN 201 Intermediate French I
FREN 202 Intermediate French II
PORT 101 Elementary Portuguese I
PORT 102 Elementary Portuguese II
PORT 110 Elementary Portuguese for Spanish Speakers
PORT 201 Intermediate Portuguese I
PORT 225 Business Communication in Portuguese
RUSS 101 Elementary Russian I

RUSS 102 Elementary Russian II
SPAN 101 Elementary Spanish I
SPAN 102 Elementary Spanish II
SPAN 201 Intermediate Spanish I
SPAN 202 Intermediate Spanish II
SPAN 210 Cinema for Spanish Conversation
SPAN 225 Business Communications in Spanish
SPAN 234 Music and Culture in the Hispanic World

## Domain II

## Three (3) Course-Credits Required

The study of problem-solving, scientific discovery, logical reasoning, and quantitative analysis.
A. One (1) course in Analysis, Modeling, and Problem Solving

The study of analytical, quantitative, and/or formal reasoning methods involving the manipulation of numbers or other symbols to solve problems.

BUAN 204 Analytical Techniques for Business
CRIM 218 Crime Mapping
CSCI 111 Computational Thinking: Building Robots and Games
CSCI 120 Introduction to Information Technology
CSCI 130 Computer Science I Using Java
DGHM 110 Introduction to Digital Humanities
DGHM 146 Introduction to Data Analysis in the Humanities
FINA 100 Principles of Financial Literacy
GEOG 111 Visualizing Social and Environmental Justice
MATH 105/105R Math for Modern Society
MATH 110/110R Mathematics for Elementary Educators I
MATH 120 Mathematics for Elementary Educators II
MATH 123/123R Introduction to Functions
MATH 180 Precalculus
MATH 217 Business Calculus
MATH 219 Calculus I
MUSC 201 Theory I: Materials of Music
PHIL 103 Introduction to Logic
PHIL 131 Critical Reasoning
QUAN 201 Quantitative Modeling for Business and Economics
RAMS 101DH First-Year Seminar: Explorations in Digital Humanities
STAA 127 Statistics for Social Sciences
STAT 107/107R Business Statistics
STAT 117/117R Introduction to Statistics
STAT 157 Probability and Statistics
STAT 208 Statistics for the Natural Sciences
B. Two (2) courses in Natural Sciences
(The two courses must be from two different subject codes; at least one of the courses must be a lab science course)
The study of classical and modern principles of life and physical sciences, together with a critical appreciation of how scientific knowledge has been constructed, including methods of validating the results of scientific inquiry.
Notes about Courses in this Domain

- The specific Mathematics course used to satisfy the Common Core requirement cannot be used to fulfill Domain II-A.
- Sciences: Students must take two (2) sciences courses, one of which must be a lab science course. The two courses may not have the same subject prefix code.

ASTR 128 Solar System Astronomy
ASTR 130 Search for Life in the Universe
ASTR 230 Stars and Galaxies
BIOL 101/101L Biological Concepts with Lab

BIOL 103 Biological Perspectives on Environmental Issues
BIOL 109/109L Introduction to Biological Science with Lab
BIOL 114 A Human Perspective on Genetics
BIOL 130/130L Principles of Biology with Lab
BIOL 142/142L Introduction to Human Biology with Lab
BIOL 203 Plants and Society
CHEM 101 The Chemistry of Life
CHEM 103/103L Introductory Chemistry with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 131/131L Science, Environment, and Health with Lab
EASC 101 Climate Change is Now: An Introduction to Earth Systems
EASC 108 Understanding the Weather: Introduction to Meteorology
EASC 118 Our Blue Planet: An Introduction to Oceanography
FDSC 151 Principles of Food Science
FDSC 161/161L Introduction to Food Science and Technology with Lab
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab
HLTH 140 Introduction to Exercise Science
NUTR 110 Fundamentals of Nutrition Science
PHSC 109 Introduction to Physical Science with Lab
PHYS 111/111L Physics, Nature, and Society with Lab
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab
PHYS 211/211L Principles of Physics I with Lab
RAMS 101BI First-Year Seminar: Biological Perspectives
RAMS 101CH First-Year Seminar: Topics in Chemistry
RAMS 101ES First-Year Seminar: Earth Science Perspectives
RAMS 101FS First-Year Seminar: Topics in Food Science
RAMS 101HW First Year Seminar: Health and Wellness Perspectives
RAMS 101NE First-Year Seminar: Topics in Neuroscience

## Domain III

## Three (3) Course-Credits Required

The study of human behavior, cultures, and societies.
A. One (1) course in Perspectives on the Past

The study of human behavior, culture, and expression through explorations of the past.
ANTH 172 Interpreting the Past: Archaeological Perspectives
ANTH 203 Human Origins
ANTH 206 Forensic Anthropology
ANTH 231 Great Discoveries in Global Archaeology
ARTH 270 History of Art I
ARTH 272 History of Art II
ECON 106 American Economic History
ENGL 209 Film History: 1895-1960
ENGL 236 Desire and Power in Early Western Literature
FSHN 223 History of Costume
FSHN 226 History of Textiles
HSTY 105 Europe and the World to circa 1450
HSTY 106 Europe and the World since circa 1450
HSTY 111 United States History to Reconstruction
HSTY 112 United States History since Reconstruction
HSTY 133 Latin America, Independence to the Present
HSTY 165 Slavery, Race, and Rights in American History
HSTY 169 Sex and the Sixties

HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age of Revolutions, 17501850
HSTY 186 History of Modern Violence
HTMG 128 Exploring Massachusetts Heritage Tourism
MUSC 151 History and Literature of Jazz
MUSC 220 Women in Music
MUSC 273 Beats, Bars, and Breaks: Hip-Hop Music in the United States
PHIL 201 History of Ancient Philosophy
POSC 206 Constitutional Law: Powers of the Government
POSC 209 The American Supreme Court
POSC 211 Political Theory: Justice, Law, and Order
POSC 223 Bureaucratic Politics and Power
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
RAMS 101FN First-Year Seminar: Food, Nutrition, and Society
RAMS 101HI First-Year Seminar: Explorations of the Past
B. One (1) course in Perspectives on the Contemporary World

The study of human behavior, culture, and expression through explorations of the present.
ANTH 161 Cultural Anthropology
ANTH 243 Indigenous Cultures of North America
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
CFST 118 Child, Family, School, and Community: Connections and Collaborations
COMM 115 Human Communication
COMM 180 Introduction to Theatre Studies
COMM 207 Interpersonal Dialogue
COMM 215 Science Communication
CRIM 121 Sociological Perspectives on Criminology
CRIM 201 White Collar Crime
CRIM 211 Crime and Inequality
CRIM 224 Juvenile Delinquency
CRIM 240 Drugs, Social Control and the Law
CRIM 270 Social Deviance
CSCI 135 Information, Technology, and Society
DFST 101 Introduction to Deaf Studies
ECON 100 Contemporary Economic Problems and Issues
ECON 102 Principles of Microeconomics
ENGL 203 Contemporary Global Literature
ENGL 240 LGBTQ Literature
FSHN 110 Fashion: Designer to Consumer
FSHN 208 Sustainability in the Fashion Industry
GEOG 101 Introduction to Human Geography
GEOG 180 Native Americans: The Original Injustice on American Soil
GEOG 211 Cultural Geography
GEOG 237 Geopolitical Economy of Global Climate Change
HLTH 110 Wellness for Life
HSTY 146 Feminism Then and Now: What does the Future Hold?
HTMG 101 Introduction to Hospitality and Tourism
MUSE 110 Introduction to Museum Studies
MUSC 171 World Music Cultures
NUTR 212 Food System Sustainability
PHIL 105 Introduction to Political and Social Philosophy
POSC 110 Introduction to American Politics

POSC 200 Model United Nations
POSC 213 Political Parties and Interest Groups
POSC 218 The American Presidency and Congress
POSC 229 Public Policy Analysis
POSC 250 American Legal Systems
PSYC 101 General Psychology
PSYC 200 Psychology of Development
RAMS 101CM First-Year Seminar: The Power of Communication
RAMS 102EN First-Year Seminar: Literature and the Contemporary World
RAMS 101EV First Year Seminar: Environmental Science and Policy Perspectives
RAMS 101FA First-Year Seminar: Topics in Fashion
RAMS 101GY First-Year Seminar: Geographical Perspectives
RAMS 102HI First-Year Seminar: Commemoration and How We Remember the Past
RAMS 101PO First-Year Seminar: Political Perspectives
RAMS 101PS First-Year Seminar: Psychological Perspectives
RAMS 101SO First-Year Seminar: Social Dynamics, Culture, and Society
SOCI 101 Introduction to Sociology
SOCI 130 Social Problems
SOCI 212 Sociology of Families
SOCI 218 Women in Society
SOCI 230 Law and Society
SOCI 263 Social Inequality
SOCI 264 Black Communities and Institutions
SOCI 282 Society, Technology, and the Future
C. One (1) course Global Competency, Ethical Reasoning, and/or Human Diversity
The study of global systems and issues, ethical principles, and/or differences and commonalities among groups of people. Courses in this group can incorporate any or all of these topics.
ANTH 207 Global Issues in Anthropology
ANTH 290 Non-Western Cultural Studies Tour
ARTH 200 Art and Social Values
ARTH 285 The Art of Asia
ARTH 288 Latin American Art
CHIN 186 Through the Dragon's Eyes: Modern China's Cultures and Traditions
COMM 202 Global Media
CSCI 138 Information, Technology and the Environment
ECON 101 Principles of Macroeconomics
ECON 200 The Economics of Globalization
EDUC 222 Sheltered English Immersion
ENGL 124 Literature and Social Justice
ENGL 231 Contemporary African American Cinema
ENGL 248 Literature of the Harlem Renaissance
ENGL 260 American Ethnic Literature
ENGL 263 African American Women Writers
ENGL 264 African American Literature
FSHN 229 Cultural Dress
GEOG 110 World Regional Geography
GEOG 206 Political Geography
GEOG 222 Geographic Perspectives on Globalization
GEOG 250 Geography of the United States and Canada
GEOG 252 Geography of Europe
GEOG 254 Geography of Monsoon Asia

```
GEOG 255 Geography of Sub-Saharan Africa
GEOG 256 Geography of the Middle East
GEOG 258 Geography of the British Isles
GEOG 291 Western Regional Geography: Field Study
GLST 101 Introduction to Global Studies
HSTY 102 The Comparative History of World Civilizations
HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World
HSTY }149\mathrm{ Twentieth Century China
LING 110 The Languages of the World
LING 200 Language and Linguistics
PHIL 102 Introduction to Ethics: Why be Moral?
PHIL 222 Bioethics
POSC 120 Introduction to World Politics
POSC 216 Film and Politics
POSC 220 The Politics of Globalization
POSC 246 Comparative Politics
POSC 269 Building Peace After Conflict
RAMS 101AH First-Year Seminar: Storytelling through Art History
RAMS 102BI First-Year Seminar: Biological Science and Society
RAMS 101ED First-Year Seminar: Diverse Perspectives in Education
SOCI 203 Introduction to Critical Race Theory
SOCI 204 Environmental Sociology
SOCI 210 Latinxs in the United States
SOCI 213 Social Class
SOCI 220 Sport in Society
SOCI 245 Race and Ethnicity
SOCI 254 Social Conflict in Northern Ireland and Ireland
SOCI 288 Immigration in the United States
```


## General Education Requirements for the Majors in Elementary Education and Early Childhood Education

The Domain General Education courses, with subjects related to the Massachusetts Curriculum Frameworks, are required for students in the Coordinate Major in Elementary Education.

Common Core: ENWR 110 Composition II
MATH 110 Mathematics for Elementary Educators I
Domain I-A: $\qquad$ Any Course from Domain I-A
Domain I-B: $\qquad$ Any Course from Domain I-B
Domain I-C: $\qquad$ Any Elementary or Intermediate Language Course Domain II-A: MATH 120 Mathematics for Elementary Educators II Domain II-B (Two (2) courses required): BIOL 101 Biological Concepts PHSC 109 Introduction to Physical Science
Domain III-A: HSTY 111 United States History to Reconstruction
Domain III-B: PSYC 200 Psychology of Development
Domain III-C: GEOG 110 World Regional Geography

## PLACEMENT TESTING

As required by the Massachusetts State Board of Higher Education, entering students will be tested in order to ensure proper placement in courses. Students will take tests to determine their abilities in languages, mathematics, and writing.

Dates and times for the examinations during the academic year will be determined prior to the beginning of each semester. Please contact the Academic Advising Center for reservations.

Students may be exempt from each of these tests and placed directly into courses based on the following criteria:

## Math Placement Testing

FSU Mathematics Placement Pilot - for eligibility to enroll in MATH and STAT courses at Framingham State University.
I. Numbers, Arithmetic, Algebra (NAA): to determine if Recitation sections of 100-level MATH and STAT courses are required.
A. Two tiers of scoring:

1. Scores $<70 \%$ : Recitation 100 -level course required.
2. Scores $\geq 70 \%$ : Eligibility to enroll in 100 -level MATH and STAT courses other than MATH 180 Precalculus and STAT 157 Probability and Statistics; no recitation required for 100-level courses; may take Functions Placement Exam.
II. Functions (FNC): to determine eligibility beyond MATH 123 Introduction to Functions.
A. Three tiers of scoring:
3. Scores $<40 \%$ : Eligibility to enroll in MATH 123 Introduction to Functions without Recitation.
4. Scores $\geq 40 \%$ and $<70 \%$ : Eligibility to enroll in MATH 180 Precalculus, STAT 157 Probability and Statistics, and STAT 203 Statistics for the Natural Sciences.
5. Scores $\geq 70 \%$ : Eligibility to enroll in MATH 219 Calculus I and MATH 206 Discrete Mathematics I (recommended consultation with the Mathematics Department).
Placement Exams are available on Canvas, offered at specific times during the calendar year; a single retake is possible upon request (must be completed during regular offerings).

Placement Policies: based on incoming HS GPA, adjusted.

- All STEM and AEF majors must take the NAA Placement Exam.
- All incoming students with High School GPA < 3.0: Must complete the NAA Placement Exam in order to be eligible for a 100 -level MATH or STAT course without Recitation.
O If no NAA Placement Exam score is recorded, students are placed into Recitation sections of 100 -level MATH or STAT courses and may not enroll in MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, or STAT 157 Probability and Statistics.
- All incoming students with High School GPA $\geq 3.0$ : Eligible for any 100 -level MATH or STAT course without Recitation other than MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, and STAT 157 Probability and Statistics.
o All students interested in enrolling in MATH 123 Introduction to Functions must take the NAA Placement Exam.

Mathematics PMTH - Mathematics Placement based on High School GPA of 3.00
PNAA - FSU Math Placement Exam - Numbers, Arithmetic, Algebra (NAA)
If displayed on degree audit, the PNAA code takes precedence over the PMTH code. PFNC - FSU Math Placement Exam - Functions (FNC)
If displayed on degree audit, the PFNC code takes precedence over the PNAA code.
PTTR - Math Placement based on Transfer Credit
NOTE: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA
Exam, if MATH 123 was not accepted in Transfer.

## Placement and Placement Code Explanation <br> Code

PMTH:
10.0 Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
NOTE: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
10.3 Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation required.

Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam.
Note: All students interested in MATH 123 must take the Placement Exam regardless of PMTH code.

## PNAA:

11.0/11.3 Completed FSU Math Placement NAA Exam.

Eligible to enroll in MATH 105R, MATH 110R, MATH 123R, STAT 107R, STAT 117R with Recitation
12.0/12.3 Completed FSU Math Placement NAA Exam.

Eligible to enroll in MATH 105, MATH 110, MATH 123, STAT 107, STAT 117 - No Recitation Required
(Excludes enrollment in MATH 180, STAT 157).
Note: Students are encouraged to take the FSU Math Placement FNC exam to determine eligibility beyond MATH 123
PFNC:
13.0/13.3 Eligible to enroll in MATH 123 - No Recitation Required.
14.0/14.3 Eligible to enroll in MATH 180, STAT 157, STAT 203.
15.0/15.3 Eligible to enroll in MATH 219, MATH 206 (Upon consultation with the Math Dept).

## PTTR:

0.0 No prior math transfer coursework received.

Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
Note: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
17.0 Remedial Mathematics Coursework completed at previous institution. Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.
19.0 Indicates college-level math course has been accepted in transfer. Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required

Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.

## Writing Placement Testing

Writing: First-Year, transfer, and continuing students will be placed through one of the following methods:

Placement by High School GPA
Three tiers of placement, as follows:

- Students with a High School GPA greater than 2.99 are automatically eligible to enroll in ENWR 110 Composition II.
- Students with a High School GPA between 2.70 and 2.99 , inclusive, are required to enroll in ENWR 105 Composition I. However, these students have the option to take the writing placement exam for a more advanced placement during one of the first two opportunities to do so.
- Students with a High School GPA lower than a 2.70 are required to enroll in ENWR 100 Introduction to College Writing with Studio. However, these students have the option to take the writing placement exam for a more advanced placement during one of the first two opportunities to do so.

```
Placement by Test Score or Prior Coursework
    Students with one of the following test scores or prior coursework will be automatically
    eligible to enroll in ENWR 110 Composition II:
    - An SAT Critical Reading score greater than 600 (this is the version offered prior to
        March 2016)
    - An SAT Reading score 32 or greater (this is the version offered since March 2016)
    - An AP Language and Composition score of 3. A score of 4 or 5 receives transfer
    credit for ENWR 110 Composition II.
    - Transfer of a course equivalent to ENWR 105 Composition I
    Students without a High School GPA, appropriate test score, or prior coursework will also
    have two opportunities to take the writing placement exam. If they do not complete the
    placement exam, they will be placed in ENWR 100 Introduction to College Writing.
Writing Code Interpretation
Code Explanation
    0.0-2.1 Student must enroll in and successfully complete ENWR 100 Composition I with
    Writing Studio before being eligible to enroll in ENWR 110 Composition II. Prior
    to the start of the semester, a writing placement test may be available.
2.3 Student must enroll in and successfully complete ENWR 105 Composition I before
    being eligible to enroll in ENWR 110 Composition II.
3.0 Student is eligible to enroll in ENWR 110 Composition II.
4.0 Student is eligible to enroll in ENWR 110 Composition II. Student has successfully
    completed non-credit preparatory coursework at another institution.
5.0 Student is eligible to enroll in ENWR 110 Composition II. Student has been
    awarded transfer credit equivalent to ENWR 105 Composition I.
9.0 Equivalent of ENWR 110 Composition II has been accepted in transfer.
```


## World Languages Placement Testing

Language: All students who plan to study a language with which they have prior experience must take the Language Placement exam in a semester prior to enrolling in the desired language course.
Students are not required to take the language placement test if they:

- speak another language fluently; or
- have no prior experience with the language they plan to study; or
- have transferred in a language course at the Elementary I level or higher; or
- have satisfied the MassTransfer General Education Foundation Block.

Language Code Interpretation
Code Placement
0 Student has not taken the Emmersion Placement test.
1 Earned a 1 in the Emmersion Placement test:
Eligible to enroll in Elementary I of the language in which the student tested.
2 Earned a 2 in the Emmersion Placement test: Eligible to enroll in Elementary II of the language in which the student tested.
3 Earned a 3 in the Emmersion Placement test: Eligible to enroll in Intermediate I of the language in which the student tested.
4 Earned a 4 in the Emmersion Placement test: Eligible to enroll in Intermediate II of the language in which the student tested.
5 Earned a 5 or above in the Emmersion Placement test:
Eligible to enroll in a 200 -level course beyond Intermediate II of the language in which the student tested.
6 Waiver received from World Languages Department Chair. Students may petition for the waiver if their high school language is other than English (usually applies to international students).

NOTE: For students majoring in English, the foreign language requirement for the major is satisfied with a Placement Code of 3 or higher.

# Accounting, Economics, and Finance 

## Chair: Laura Lamontagne

Professors: Laura Lamontagne, Lori Lavigne*, Fahlino Sjuib, Ya-Ying (Mary) C. Yeh**<br>Associate Professors: Luis Rosero**<br>Assistant Professors: Jean M. Cooley, Rongbing Liu, Honggang Qui, Sae Young Yoon

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## Majors

The Department of Accounting, Economics and Finance offers a Bachelor of Arts (B.A.), major in Economics and Bachelor of Science (B.S.), with majors in Accounting, and Finance.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-A (Analysis, Modeling, and Problem Solving) requirement is satisfied through the completion of the major in Accounting or Economics. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of major in Finance.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## ACCOUNTING MAJOR (U_AC)

## Major Required Core (14):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MATH 123 Introduction to Functions*
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
QUAN 201 Quantitative Modeling for Business and Economics
QUAN 202 Statistical Analysis for Business and Economics
*Students with a score on the mathematics placement exam which allows them to take MATH 180 Precalculus may substitute MATH 180 Precalculus, MATH 215 Finite Mathematics, or MATH 219 Calculus I for MATH1 23 Introduction to Functions.

## Required Capstone Course:

MGMT 485 Business Policy and Strategy
Accounting Concentration Core courses (UACG) (6):
ACCT 303 Accounting Information Systems
ACCT 321 Intermediate Accounting I
ACCT 322 Intermediate Accounting II
ACCT 326 Cost Accounting
ACCT 428 Taxation
ACCT 429 Auditing

## ECONOMICS MAJOR (U_EO)

## Major Core courses (8):

ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
ECON 301 Intermediate Macroeconomic Theory
ECON 302 Intermediate Microeconomic Theory
MATH 123 Introduction to Functions*
QUAN 201 Quantitative Modeling for Business and Economics
QUAN 202 Statistical Analysis for Business and Economics
*Students with a score on the mathematics placement exam which allows them to take MATH 180 Precalculus may substitute MATH 180 Precalculus, MATH 215 Finite Mathematics, or MATH 219 Calculus I for MATH123
Introduction to Functions.

## Required Capstone Course (1):

ECON 480 Senior Economics Seminar

## Major Core Elective courses (5)

Choose five (5) courses from the following list (No more than one (1) can be at the 100-level and at least three (3) must be 300-level or above):

ECON 100 Contemporary Economic Problems and Issues
ECON 106 American Economic History
ECON 200 Economics of Globalization
ECON 309 Labor Economics
ECON 320 Financial Markets and the Monetary System
ECON 323 The Economics of Sports
ECON 333 Environmental Economics
ECON 402 Industrial Organization
ECON 410 International Trade
ECON 414 International Finance
ECON 495 Internship in Economics
ECON 496 MetroWest Economic Research Center (MERC) Internship
QUAN 470 Applied Econometrics for Economics and Business

## ECONOMICS CONCENTRATIONS

In addition to the prescribed major requirements, Economic majors may also choose to declare a concentration in either Business or Finance. Additional course requirements for these concentrations are identified as follows:

## BUSINESS (UEOB) (5 courses)

## Four (4) Required courses:

ACCT 220 Introduction to Financial Accounting
FINA 248 Managerial Finance
MGMT 280 Organizational Behavior
MRKT 181 Marketing Principles

## Choose one (1) elective from:

ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
ECON 414 International Finance
MGMT 215 Legal Environment of Business
MGMT 381 Human Resource Management

## FINANCE (UEOF) (5 COURSES)

## Four (4) Required courses:

ACCT 220 Introduction to Financial Accounting
ECON 320 Financial Markets and the Monetary System
FINA 248 Managerial Finance
FINA 431 Corporate Finance

## Choose one (1) electives courses from:

ECON 414 International Finance
FINA 300 Fundamentals of Financial Planning and Insurance
FINA 445 Investments

## FINANCE MAJOR (U_FI)

## Major Required Core (13):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MATH 123 Introduction to Functions*
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management

MRKT 181 Marketing Principles
QUAN 201 Quantitative Modeling for Business and Economics
QUAN 202 Statistical Analysis for Business and Economics
*Students with a score on the mathematics placement exam which allows them to take MATH 180 Precalculus may substitute MATH 180 Precalculus, MATH 215 Finite Mathematics, or MATH 219 Calculus I for MATH123 Introduction to Functions.

## FINANCE CONCENTRATIONS

All Finance majors need to select either Finance - General or Financial Planning as their concentration as follows:

## FINANCE - GENERAL (UFIG) (7)

## Five (5) Concentration Core Required courses:

ECON 320 Financial Markets and the Monetary System
ECON 414 International Finance
FINA 431 Corporate Finance
FINA 445 Investments
FINA 480 Senior Finance Seminar
Choose two (2) elective courses from:
ACCT 303 Accounting Information Systems
ACCT 321 Intermediate Accounting I
ECON 301 Intermediate Macroeconomics Theory
ECON 496 MetroWest Economic Research Center (MERC) Internship
FINA 300 Fundamentals of Financial Planning and Insurance
FINA 321 Retirement and Estate Planning
FINA 495 Internship in Finance

## FINANCIAL PLANNING (UFIP) (7)

## Five (5) Concentration Core Required courses:

ACCT 428 Taxation
FINA 300 Fundamentals of Financial Planning and Insurance
FINA 321 Retirement and Estate Planning
FINA 400 Case Studies in Financial Planning
FINA 445 Investments

## Choose two (2) elective courses from:

ECON 320 Financial Markets and the Monetary System
ECON 414 International Finance
FINA 100 Principles of Financial Literacy
FINA 431 Corporate Finance
FINA 495 Internship in Finance

## MINORS

## MINOR IN ACCOUNTING (5 COURSES)

The minor requires five (5) courses as follows:

## Four (4) required courses:

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
ACCT 321 Intermediate Accounting I
ACCT 322 Intermediate Accounting II
One (1) elective from the following list:
ACCT 303 Accounting Information Systems
ACCT 326 Cost Accounting
ACCT 428 Taxation
ACCT 429 Auditing

## MINOR IN ECONOMICS (5 Courses)

## Required Courses:

ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
Plus three (3) electives with at least two at the 200-level or above from:
ECON 100 Contemporary Economic Problems and Issues
ECON 106 American Economic History
ECON 200 The Economics of Globalization
ECON 301 Intermediate Macroeconomic Theory
ECON 302 Intermediate Microeconomic Theory
ECON 309 Labor Economics
ECON 320 Financial Markets and the Monetary System
ECON 323 The Economics of Sports
ECON 333 Environmental Economics
ECON 402 Industrial Organization
ECON 410 International Trade
ECON 414 International Finance
ECON 495 Internship in Economics
ECON 496 MetroWest Economic Research Center (MERC) Internship
QUAN 201 Quantitative Modeling for Business and Economics
QUAN 202 Statistical Analysis for Business and Economics
QUAN 470 Applied Econometrics for Economics and Business

## MINOR IN FINANCE (5 COURSES)

The minor requires five (5) courses as follows:

## Four (4) required courses:

ACCT 220 Introduction to Financial Accounting
ECON 320 Financial Markets and the Monetary System
FINA 248 Managerial Finance
FINA 431 Corporate Finance or
FINA 445 Investments
One (1) electives from the following list:
ECON 301 Intermediate Macroeconomic Theory
ECON 414 International Finance
FINA 300 Fundamentals of Financial Planning and Insurance
FINA 321 Retirement and Estate Planning
FINA 400 Case Studies in Financial Planning
FINA 431 Corporate Finance or FINA 445 Investments

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Course

ECON 100 Contemporary Economic Problems and Issues
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
ECON 106 American Economic History
ECON 200 The Economics of Globalization
FINA 100 Principles of Financial Literacy
QUAN 201 Quantitative Modeling for Business and Economics

## Domain

III-B
III-C
III-B
III-A
III-C
II-A
II-A

## Art and Music

## Chair: Marc A. Cote

Professors: Brian Bishop, Mary E. (Lisa) Burke, Marc A. Cote Jennifer C. Dowling, Timothy McDonald, Laura Osterweis*, Erika Schneider, Keri Straka<br>Associate Professors: Robert H. Alter, Christian Gentry, Stephanie Grey, Yumi Park, Paul Yalowitz<br>Assistant Professors: Elizabeth Krakow

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## Program Accreditation

Framingham State University is an accredited institutional member of the National Association of Schools of Art and Design (NASAD).

## Application to the Major

All prospective students for the Studio Art major regardless of concentration are required to submit a portfolio, which are reviewed by the faculty. Applicants for admission into the major should submit their portfolio digitally through SlideRoom.
(https://framingham.slideroom.com)
The portfolio should contain 10-15 examples of the strongest and most recent artwork made by the applicant.
The portfolio should include artworks:

- Created from direct observation (minimum one self-portrait and one still-life);
- Using a variety of media, techniques, subject matter, and scale;
- That demonstrate dedication, sustained interest, and artistic development over time;
- Sketchbooks, graphic design work, and experimental pieces are also acceptable.
- Application Deadline(s): Fall Semester - November $15^{\text {th }}$ (Early Decision), February $15^{\text {th }}$, March $15^{\text {th }}$ (Transfers); Spring Semester - December $1^{\text {st }}$.
*Current FSU Students may apply for the Studio Art major on a rolling basis by submitting their work through SlideRoom. (https://framingham.slideroom.com)


## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain I-A (Creative Arts) is satisfied through the completion of the Studio Art major and Domain I-B (Humanities) is satisfied through completion of the Art History major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Course Credit and Competency Based Assessment

Students who enrolled in ARTS 110 Introduction to Drawing (Gen. Ed., Domain I-A) and received a grade of $B(3.00)$ or above, and who have passed the Portfolio Review are permitted to substitute ARTS 110 Introduction to Drawing for ARTS 200 Drawing Fundamentals for degree requirements.

## ART HISTORY MAJOR (U_AH)

## Major Core Requirements:

Six (6) core requirements consisting of:
ARTH 270 History of Art I
ARTH 272 History of Art II
ARTH 273 Modern Art History
ARTH 285 The Art of Asia or
ARTH 288 Latin American Art
ARTH 383 Contemporary Art History
ARTH 483 Seminar in the History of Art or
ARTH 495 Internship in Art History
Six (6) concentration (UAHG) requirements consisting of:
Four (4) Art History (ARTH) electives; at least one (1) at the 300-level or above
Two (2) Art Studio (ARTS) courses

## Notes:

- Reading knowledge of at least one foreign language (usually French/Italian and German) is recommended for those contemplating graduate programs in Museum Studies, Art Conservation, or Art History.
- Internship in a museum is highly recommended.


## STUDIO ART MAJOR (U_AR)

## Studio Art Major Core Requirements:

Ten (10) core requirements consisting of:
Three (3) Art History courses:
ARTH 270 History of Art I
ARTH 272 History of Art II
ARTH 273 Modern Art History

Seven (7) Studio Art courses:
ARTS 200 Drawing Fundamentals
ARTS 203 Form and Structure
ARTS 213 Time and Space
ARTS 222 Color and Design
ARTS 230 Digital Tools for Art and Design
ARTS 254 Painting Methods
ARTS 300 Life Drawing*
(* Not required for Concentration in Graphic Design)

## STUDIO ART MAJOR CONCENTRATIONS:

All Studio Art majors must select a concentration no later than the end of the freshmen year from the following options:

## CERAMICS CONCENTRATION (UARC)

Major Core requirements (10) and the following concentration requirements (7):
Four (4) courses in Studio Art:
ARTS 241 Ceramics
ARTS 266 Wheelworking
ARTS 416 Advanced Ceramics Studio
ARTS 487 Senior Studio Art Seminar
One (1) course in Art History:
ARTH 383 Contemporary Art History
Two (2) Ceramic Electives from the following:
ARTS 307 Functional Ceramics
ARTS 324 Image and Clay
ARTS 360 Ceramic Sculpture

## GRAPHIC DESIGN CONCENTRATION (UARD)

Major Core requirements (9) and the following concentration requirements (8):
Four (4) courses in Studio Art:
ARTS 361 Typography
ARTS 366 Branding and Identity Design
ARTS 431 Advanced Graphic Design
ARTS 488 Senior Portfolio: Graphic Design and Illustration
ARTS 495 Internship in Studio Art
Choose one (1) in Art History from the following:
ARTH 333 History of Graphic Design
ARTH 383 Contemporary Art History
Choose two (2) electives from the following:
ARTS 188 Introduction to Photography: Black and White
ARTS 216 Interactive Design
ARTS 316 Advanced Interactive Design
ARTS 333 Motion Graphics and Animation
ARTS 335 Principles of User Experience Design
ARTS 344 Digital Painting
ARTS 356 Illustration

## ILLUSTRATION CONCENTRATION (UARL)

Major Core requirements (10) and the following concentration requirements (7):
Four (4) courses in Studio Art:
ARTS 356 Illustration
ARTS 386 Sequential Illustration: Children’s Books, Comics, \& Graphic Novels
ARTS 456 Advanced Illustration
ARTS 488 Senior Portfolio: Graphic Design and Illustration
One (1) course in Art History:
ARTH 383 Contemporary Art History
Choose two (2) Studio Art Electives from the following:
ARTS 344 Digital Painting
ARTS 351 Watercolor
ARTS 354 Painting Composition
ARTS 358 Landscape Painting
ARTS 361 Typography
ARTS 369 Figure Painting
ARTS 495 Internship in Studio Art

## PAINTING CONCENTRATION (UARA)

Major Core requirements (10) and the following concentration requirements (7):
Four (4) courses in Studio Art:
ARTS 354 Painting Composition
ARTS 419 Advanced Drawing Studio
ARTS 478 Advanced Painting
ARTS 487 Senior Studio Art Seminar
One (1) course in Art History:
ARTH 383 Contemporary Art History
Two (2) Intermediate Painting Electives from the following:
ARTS 315 Collage and Mixed Media
ARTS 351 Watercolor
ARTS 358 Landscape Painting
ARTS 369 Figure Painting
ARTS 377 Abstract Painting
ARTS 394 Encaustic

## PHOTOGRAPHY CONCENTRATION (UARO)

The Concentration in Photography encompasses the history and varied practice of photography as an aesthetic medium, a documentary mode of communication, and a vehicle for personal expression. The curriculum is comprised of courses that explore both the aesthetic and technical aspects of the photographic medium, as well as photography's relationship to the history of art.

Major Core requirements (10) and the following concentration requirements (8):
Four (4) courses in Studio Art:
ARTS 188 Introduction to Photography: Black and White
ARTS 235 Intermediate Photography: Color
ARTS 441 Advanced Photography
ARTS 487 Senior Studio Art Seminar
One (1) course in Art History:
ARTH 226 History of Photography
ARTH 383 Contemporary Art History
Choose Three (3) Electives from the following:
ARTS 205 Photography of Architecture
ARTS 242 Silkscreen
ARTS 231 Printmaking
ARTS 315 Collage and Mixed Media
ARTS 363 Photojournalism and Digital Narrative
ARTS 495 Internship in Studio Art

## PRINTMAKING CONCENTRATION (UARP)

Major Core requirements (10) and the following concentration requirements (7):
Four (4) courses in Studio Art:
ARTS 246 Printmaking
ARTS 419 Advanced Drawing Studio
ARTS 479 Topics in Advanced Printmaking
ARTS 487 Senior Studio Art Seminar
One (1) course in Art History:
ARTH 383 Contemporary Art History
Two (2) Printmaking Electives from the following:
ARTS 242 Silkscreen
ARTS 308 Woodcut
ARTS 328 Intaglio

## SCULPTURE CONCENTRATION (UARS)

Major Core requirements (10) and the following concentration requirements (6):
Three (3) courses in Sculpture:
ARTS 313 Sculpture Methods and Materials
ARTS 403 Advanced Sculpture Studio
ARTS 487 Senior Studio Art Seminar
One (1) course in Art History:
ARTH 383 Contemporary Art History
Two (2) Studio Art Electives from the following:
ARTS 241 Ceramics
ARTS 315 Collage and Mixed Media
ARTS 360 Ceramic Sculpture
ARTS $\qquad$ Any Printmaking Course

ARTS 419 Advanced Drawing Studio
ARTS 473 Special Topics in Studio Art

## STUDIO ART CONCENTRATION (UARG)

Major Core requirements (10) and the following concentration requirements (7):
Five (5) Studio Art Electives 200-level and above
Note: no more than three (3) Studio Art Electives may be at the 200-level One (1) course in Art History:

ARTH 383 Contemporary Art History
One (1) Capstone Course:
ARTS 487 Senior Studio Art Seminar

## ART EDUCATION CONCENTRATION (UARE)

Major Core requirements (10) and the following concentration requirements (4):
One (1) of the following printmaking courses:
ARTS 246 Printmaking
ARTS 308 Woodcut
ARTS 328 Intaglio
ARTS 338 Lithography
One (1) of the following ceramics or sculpture courses:
ARTS 241 Ceramics
ARTS 266 Wheelworking
ARTS 307 Functional Ceramics
ARTS 313 Sculpture Methods and Materials
ARTS 403 Advanced Sculpture Studio
ARTS 416 Advanced Ceramics Studio
One (1) course in Art History from the following:
ARTH 282 American Art
ARTH 285 The Art of Asia
ARTH 288 Latin American Art
ARTH $\qquad$ 300- or 400-level Art History Elective

One (1) course in Studio Art:
ARTH 419 Advanced Drawing Studio
Note: Students with the Art Education Concentration must declare the appropriate Education Minor to complete the program.

## REQUIRED MINOR IN ART EDUCATION FOR STUDENTS IN THE ART EDUCATION CONCENTRATION

The Education minor shall consist of:
EDUC 200 Education in American Society with Field Study I
EDUC 222 Sheltered English Immersion
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12
PSYC 200 Psychology of Development

## Students choose either Elementary or Secondary Practicum courses below:

Elementary Licensure in Art (Pre-K - Grade 8)
EDPS 428A Secondary Professional Practicum A:
Visual Art Pre-K to Grade 8 (two course-credits)
EDPS 428B Secondary Professional Practicum B:
Visual Art Pre-K to Grade 8 (two course-credits)

## Secondary Licensure in Art (Grades 5-12)

EDPS 429A Secondary Professional Practicum A:
Visual Art Grades 5-12 (two course-credits)
EDPS 429B Secondary Professional Practicum B:
Visual Art Grades 5-12 (two course-credits)
Note: Art Department prerequisites for EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12 are as follows (prerequisites may be waived at the discretion of the Department Chair):

ARTH 270 History of Art I
ARTH 272 History of Art II
ARTH 273 Modern Art History
ARTS 200 Drawing Fundamentals
ARTS 203 Three-Dimensional Design I
ARTS 222 Color and Design
ARTS 254 Painting Methods
ARTS 300 Life Drawing

## MINORS:

## MINOR IN ART HISTORY (5 COURSES)

Five (5) courses from the art history curriculum (ARTH). Students are encouraged to discuss their plan with an Art History faculty member. At least one (1) course taken must be at the 300-level or higher.

## MINOR IN GRAPHIC DESIGN (5 COURSES)

Students in the Graphic Design minor will be introduced to the fundamentals of graphic design through hands-on practice with material resources and digital tools. Students study design principles theoretically, practically, and gain knowledge from design professionals. Students from all majors are welcome.

ARTS 140 Introduction to Graphic Design OR
ARTS 230 Digital Tools for Art and Design
ARTS 216 Interactive Design OR
ARTS 366 Branding and Identity Design
ARTS 222 Color and Design
ARTS 335 Principles of User Experience Design
ARTS 361 Typography

## MINOR IN MUSEUM STUDIES (5 COURSES)

Sponsored by the Art and Music, Fashion Design and Retailing, and History departments, this interdepartmental minor requires that students take a minimum of four (4) courses outside of their major subject area, including an internship. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits (12 semester hours) in the minor must be taken at Framingham State University.

Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN MUSIC (6 COURSES)

## Required Courses (2):

MUSC 136 Pathways to Musical Understanding
MUSC 201 Theory I: Materials of Music
One (1) required creative or performance component:
MUSC 111 Introduction to Electroacoustic Music Composition

OR
MUSC 280 Performative Exploration of Music
NOTE: Neither MUSC 111 nor MUSC 280 can be used for both the creative component and one of the three elected courses.

Three (3) additional music courses elected from the following:
MUSC 111 Introduction to Electroacoustic Music Composition
MUSC 121 Music Appreciation
MUSC 141 American Musics
MUSC 151 History and Literature of Jazz
MUSC 171 World Music Cultures
MUSC 220 Women in Music
MUSC 248 History of Rock Music to the 1970s
MUSC 275 History of Rock Music from the 1970s to Today
MUSC 280 Performative Exploration of Music

## MINOR IN STUDIO ART (5 COURSES)

Five (5) courses from the art curriculum with the advice and approval of a member of the Art faculty.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

Domain
ARTH 160 Introduction to the World of Art I-B
ARTH 200 Art and Social Values III-C
ARTH 222 Sex, Drugs, and Suicides: The Artist in Popular Culture I-B
ARTH 226 History of Photography I-B
ARTH 270 History of Art I III-A
ARTH 272 History of Art II III-A
ARTH 273 Modern Art History I-B
ARTH 282 American Art I-B
ARTH 285 The Art of Asia III-C
ARTH 288 Latin American Art III-C
ARTH 290 Study Tour: Art \& Architecture I-B
ARTS 110 Introduction to Drawing I-A
ARTS 111 Introduction to Sculpture I-A
ARTS 120 Introduction to Painting I-A
ARTS 140 Introduction to Graphic Design I-A
ARTS 167 Introduction to Studio Art I-A
ARTS 168 Introduction to Animation I-A
ARTS 188 Introduction to Photography: Black and White I-A
ARTS 205 Photography of Architecture I-A
ARTS 231 Printmaking I-A
ARTS 241 Ceramics I-A
ARTS 246 Printmaking I-A
ARTS 290 Study Tour: Art \& Architecture I-A
MUSE 110 Introduction to Museum Studies III-B
MUSC 121 Music Appreciation I-B
MUSC 136 Pathways to Musical Understanding I-B
MUSC 141 American Musics I-B
MUSC 151 The History and Literature of Jazz III-A
MUSC 171 World Music Cultures III-B
MUSC 201 Theory I: Materials of Music II-A
MUSC 220 Women in Music III-A
MUSC 222 Music Technology and Production I I-A
MUSC 248 History of Rock Music to the 1970s I-B
MUSC 273 Beats, Bars, and Breaks: Hip-Hop Music in the United States III-A
MUSC 275 History of Rock Music from the 1970s to Today I-B
MUSC 280 Performative Exploration of Music I-A
RAMS 101AH First-Year Seminar: Storytelling through Art History III-C

## Biology

Chair: Amanda M. Simons

Professors: Richard D. Beckwitt, Margaret A. Carroll.<br>Aline M. Davis, Stephen A. Dinkelacker,<br>Walter J. Lambert, Aviva E. Liebert, Amanda M. Simons, Brandi Van Roo<br>Associate Professors: Amy Knapp, Cara M. Pina, Jeffrey D. White<br>Assistant Professors: Rachel Avard, Cheng-Chaing Wu

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## General Education Requirements

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-B (Natural Sciences) and laboratory requirement are satisfied through the completion of the Biology major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## BIOLOGY MAJOR (U_BI)

## Departmental Requirements

Biology majors may elect to take a broad spectrum of courses covering the areas of biology possibly combined with a minor according to the student's interests. Students graduating with a bachelor of science in biology are employed as laboratory technicians in academic and industrial settings, sales representatives for pharmaceutical and biotechnology companies, scientific illustrators, and technical writers. Students selecting this major interested in Graduate School should consult with their academic advisor regarding appropriate elective selection. Students interested in becoming high school teachers should select the Biology Secondary Education Teaching Program (UBIT).

The following nine (9) Biology core requirements are required of Biology majors in all concentrations:

## Biology Major Core:

BIOL 125 The Biology Experience
BIOL 135/135L Foundations of Biological Science with Lab
BIOL 208/208L Genetics with Lab
BIOL 230 Professional Communication in Biology
BIOL 402 Processes of Organic Evolution
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab STAT 208 Biostatistics or

ENVS 202 Data Analysis for Scientists or
STAA 127 Statistics for the Social Sciences

Biology Major Capstone:
BIOL 460 Research Experience in Biology**
*Students proficient at the precalculus level should enroll in MATH 219 Calculus I to satisfy the Gen. Ed. Domain Common Core Math requirement.
**An original research project is required of all Biology majors. Prior to enrollment in BIOL 460 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

## CONCENTRATIONS

## GENERAL BIOLOGY (UBIG):

Biology majors may elect to take a broad spectrum of courses covering the major areas of biology: cellular and molecular biology, organismal biology, physiology, and ecology and evolutionary biology, possibly combined with a minor according to the student's interests. This curriculum prepares students for the advanced Graduate Record Examination in Biology, a prerequisite for admission to many graduate programs in biology.

Students must take an additional nine (9) concentration requirements:
MATH 123 Introduction to Functions or
MATH 180 Precalculus or
MATH 219 Calculus I

## Two (2) courses from Cell and Molecular Systems:

BIOL 218/218L Introduction to Bioinformatics with Lab
BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cellular Biology with Lab
BIOL 262/262L Molecular Biology with Lab
BIOL 356 Biology of Cancer
BIOL 400 Trends in Biotechnology
BIOL 426 Human Immunity
BIOL 432 Vertebrate Development
CHEM 300/300L Principles of Biochemistry with Lab or
CHEM 301/301L Biochemistry I with Lab
NEUR 380 Neuropharmacology

## Two (2) courses from Organismal and Physiological Systems

BIOL 212/212L Wildlife Specimen Preparation Techniques
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 235/235L Principles of Human Physiology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab
BIOL 242/242L Human Anatomy and Physiology II with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 323 Biology and Conservation of Crocodiles
HLTH 302 Exercise Physiology

NEUR 225 Biopsychology
NEUR 306 Neurophysiology

## Two (2) courses from Ecological Systems:

BIOL 203 Plants and Society
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 320/320L Animal Behavior with Lab
BIOL 321/321L Limnology with Lab
BIOL 335/335L Principles of Wildlife Biology with Lab
BIOL 344/344L Animal Physiological Ecology with Lab
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics
Two additional electives at the 200-level or above (one of these courses must focus on physiology):

Note: Choices are limited to those courses not previously taken for this concentration.
Note: One of these courses must focus on physiology:
BIOL 235/235L Principles of Human Physiology* with Lab
BIOL 242/242L Human Anatomy and Physiology II* with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 344/344L Animal Physiological Ecology* with Lab
*Only one of these courses may be taken in order to receive Biology credit.

## BIOLOGY SECONDARY EDUCATION TEACHING PROGRAM (UBIT):

Students who plan to teach at the high school level will fulfill the Commonwealth's requirements for secondary education certification in biology by completing a program similar to the general biology concentration. Students must also declare and complete the requirements for a Secondary Education Minor (see Education Department section of the catalog).

## Students must take the following additional courses:

BIOL 235/235L Principles of Human Biology with Lab or
BIOL 241/241L Human Anatomy \& Physiology I with Lab and
BIOL 242/242L Human Anatomy \& Physiology II with Lab
BIOL 248/248L Principles of Ecology with Lab
MATH 180 Precalculus or
MATH 219 Calculus I
PHYS 201/201L Physics for Earth and Life Scientists with Lab

## One (1) course from Cell and Molecular Biology Systems

BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
One (1) course from Chemistry Electives:
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab
CHEM 207/207L Organic Chemistry I with Lab
Additional courses are also required for a Secondary Education Minor (see Education section of
the University catalog).

## BIOTECHNOLOGY MAJOR (U_BT)

This program is appropriate for students interested in careers in diverse areas of biotechnology including research, pharmaceuticals, product development, sales, quality control and technical training. Students interested in graduate school should meet with their academic advisor prior to choosing electives.

## Departmental Requirements

Biotechnology majors must complete core requirements as well as additional requirements for the concentration.

## Major Core courses (10):

BIOL 125 The Biology Experience
BIOL 135/135L Foundations of Biological Science with Lab
BIOL 208/208L Genetics with Lab
BIOL 230 Professional Communication in Biology
BIOL 402 Processes of Organic Evolution
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
MATH 180 Precalculus or
MATH 219 Calculus I
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists or
STAA 127 Statistics for the Social Sciences
Biology Major Capstone:
BIOL 460 Research Experience in Biology**
*Students proficient at the precalculus level should enroll in MATH 219 Calculus I to satisfy the Gen. Ed.
Domain Common Core Math requirement.
**An original research project is required of all Biology majors. Prior to enrollment in BIOL 460 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

## General Studies Concentration

## GENERAL STUDIES (UBTG):

Students must take following concentration requirements (9-10):
CHEM 207/207L Organic Chemistry I with Lab
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab or
PHYS 211/211L Principles of Physics I with Lab and
PHYS 212/212L Principles of Physics II with Lab

## Two (2) courses from Molecular Systems:

BIOL 262/262L Molecular Biology with Lab
CHEM 300/300L Principles of Biochemistry with Lab or
CHEM 301/301L Biochemistry I with Lab
One (1) course from Cell Systems:
BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 400 Trends in Biotechnology

## One (1) course from Organismal and Physiological Systems

BIOL 212/212L Wildlife Specimen Preparation Techniques
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 235/235L Principles of Human Physiology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab
BIOL 242/242L Human Anatomy and Physiology II with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 323 Biology and Conservation of Crocodiles
NEUR 225 Biopsychology
NEUR 306 Neurophysiology
One (1) courses from Ecological Systems:
BIOL 203 Plants and Society
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 320/320L Animal Behavior with Lab
BIOL 321/321L Limnology with Lab
BIOL 335/335L Principles of Wildlife Biology with Lab
BIOL 344/344L Animal Physiological Ecology with Lab
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics

## Three (3) courses from the following list of Restricted Electives:

Note: Choices are limited to those courses not previously taken for this concentration.
BIOL 218/218L Introduction to Bioinformatics with Lab
BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
BIOL 356 Biology of Cancer
BIOL 400 Trends in Biotechnology
BIOL 426 Human Immunity
BIOL 432 Vertebrate Development
CHEM 208/208L Organic Chemistry II with Lab
CHEM 300 /300L Principles of Biochemistry with Lab or
CHEM 301 /301L Biochemistry I with Lab
CHEM 332/332L Biochemistry II with Lab*
CSCI 156 Python Programming for Applications
MATH 219 Calculus I
NEUR 380 Neuropharmacology

* Students who complete CHEM 332/332L Biochemistry II and its prerequisites are eligible for a Biochemistry minor.


## PRE-MEDICINE/HUMAN HEALTH MAJOR (U_PM)

This program is designed for students who plan to attend medical school, dental school, physician assistant graduate programs, physical therapy graduate programs, direct entry (accelerated) nursing programs, occupational/speech therapy graduate programs or graduate school. Though specific programs may have additional or slightly varying requirements, these basic courses are required by the majority of programs. Students are strongly advised to meet with their academic advisor early in their coursework and when choosing electives.

## Departmental Requirements

Pre-Medicine/Pre-Human Health majors must complete core requirements as well as additional requirements for the concentration.

## Major Core courses (10):

BIOL 125 The Biology Experience
BIOL 135/135L Foundations of Biological Science with Lab
BIOL 208/208L Genetics with Lab
BIOL 230 Professional Communication in Biology
BIOL 402 Processes of Organic Evolution
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
HEAL 100 Orientation to Health-Related Professions (Non-credit)
MATH 180 Precalculus or
MATH 219 Calculus I
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists or
STAA 127 Statistics for the Social Sciences

## Biology Major Capstone:

BIOL 460 Research Experience in Biology**
*Students proficient at the precalculus level should enroll in MATH 219 Calculus I to satisfy the Gen. Ed. Domain Common Core Math requirement.
**An original research project is required of all Biology majors. Prior to enrollment in BIOL 460 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

## General Studies Concentration

## GENERAL STUDIES (UPMG):

Students must take following concentration requirements (9):
BIOL 228/228L Microbiology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab
BIOL 242/242L Human Anatomy and Physiology II with Lab
CHEM 207/207L Organic Chemistry I with Lab

## One (1) courses from Ecological Systems:

BIOL 203 Plants and Society
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 320/320L Animal Behavior with Lab
BIOL 321/321L Limnology with Lab
BIOL 335/335L Principles of Wildlife Biology with Lab

BIOL 344/344L Animal Physiological Ecology with Lab
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics

## Three (3) courses from the following list of Restricted Electives:

Note: Choices are limited to those courses not previously taken for this concentration.
BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
BIOL 356 Biology of Cancer
BIOL 432 Vertebrate Development
BIOL 426 Human Immunity
CHEM 208/208L Organic Chemistry II with Lab
CHEM 300/300L Principles of Biochemistry with Lab
CHEM 301/301L Biochemistry I with Lab
CHEM 332/332L Biochemistry II with Lab*
MATH 219 Calculus I
NEUR 225 Biopsychology
NEUR 306 Neurophysiology
NEUR 380 Neuropharmacology
NUTR 110 Fundamentals of Nutrition Science
PHIL 222 Bioethics
PHYS 201/201L Physics for Earth and Life Sciences with Lab
PHYS 211/211L Physics I with Lab
PHYS 212/212L Physics II with Lab

* Students who complete CHEM 332/332L Biochemistry II and its prerequisites are eligible for a Biochemistry minor.


## PRE-VETERINARY MEDICINE (U_PV)

This major is for students interested working in animal studies and animal medicine. Students interested in applying to veterinary school or graduate research programs should meet with their academic advisor before choosing electives.

## Departmental Requirements

Pre-Veterinary Medicine majors must complete core requirements as well as additional requirements for the concentration.

## Major Core courses (10):

BIOL 125 The Biology Experience
BIOL 135/135L Foundations of Biological Science with Lab
BIOL 208/208L Genetics with Lab
BIOL 230 Professional Communication in Biology
BIOL 402 Processes of Organic Evolution
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
MATH 180 Precalculus or
MATH 219 Calculus I

STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists or
STAA 127 Statistics for the Social Sciences
Biology Major Capstone:
BIOL 460 Research Experience in Biology**
*Students proficient at the precalculus level should enroll in MATH 219 Calculus I to satisfy the Gen. Ed. Domain Common Core Math requirement.
**An original research project is required of all Biology majors. Prior to enrollment in BIOL 460 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

## General Studies Concentration

## GENERAL STUDIES (UPVG):

Students must take following concentration requirements (9-11):
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 344/344L Animal Physiological Ecology with Lab or
BIOL 241/241L Human Anatomy and Physiology I with Lab and
BIOL 242/242L Human Anatomy and Physiology II with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 300/300L Principles of Biochemistry with Lab or
CHEM 301/301L Biochemistry I with Lab
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab or
PHYS 211/211L Principles of Physics I with Lab and
PHYS 212/212L Principles of Physics II with Lab

## One (1) course from Cell and Molecular Systems:

BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 356 Biology of Cancer
BIOL 432 Vertebrate Development

## One (1) course from Organismal and Physiological Systems

BIOL 212/212L Wildlife Specimen Preparation Techniques
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 323 Biology and Conservation of Crocodiles
NEUR 225 Biopsychology
NEUR 306 Neurophysiology
One (1) course from Ecological Systems:
BIOL 203 Plants and Society
BIOL 320/320L Animal Behavior with Lab

BIOL 321/321L Limnology with Lab
BIOL 335/335L Principles of Wildlife Biology with Lab
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics

## WILDLIFE AND ENVIRONMENTAL BIOLOGY MAJOR (U_WE)

Students in this major take courses in animal and plant systems, ecology, wildlife biology, and communication. Graduates of this program are prepared for graduate studies or careers as wildlife biologists, wildlife managers, conservation biologists, environmental consultants, park rangers and zookeepers. Upon graduation students will have completed the majority of the curriculum requirements for certification as a Wildlife Biologist by the Wildlife Society. Students interested in learning more about this certification should meet with their advisor prior to choosing electives.

## Departmental Requirements

Biotechnology majors must complete core requirements as well as additional requirements for the concentration.

## Major Core courses (10):

BIOL 125 The Biology Experience
BIOL 135/135L Foundations of Biological Science with Lab
BIOL 208/208L Genetics with Lab
BIOL 230 Professional Communication in Biology
BIOL 402 Processes of Organic Evolution
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
MATH 180 Precalculus or
MATH 219 Calculus I
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists or
STAA 127 Statistics for the Social Sciences

## Biology Major Capstone:

BIOL 460 Research Experience in Biology**
*Students proficient at the precalculus level should enroll in MATH 219 Calculus I to satisfy the Gen. Ed. Domain Common Core Math requirement.
**An original research project is required of all Biology majors. Prior to enrollment in BIOL 460 Research Experience in Biology, the student should meet with their academic advisor and with other Biology faculty to tailor the research project to the student's interests and career goals.

## General Studies Concentration

## GENERAL STUDIES (UWEG):

Students in this major take courses in animal and plant systems, ecology, wildlife biology, and communication. Graduates of this program are prepared for graduate studies or careers as wildlife biologists, wildlife managers, conservation biologists, environmental consultants, park rangers and zookeepers. Upon graduation students will have completed the majority of the curriculum requirements for certification as a Wildlife Biologist by the Wildlife Society. Students interested in learning more about this certification should meet with their advisor prior to choosing electives.

Students must take an additional ten (10) concentration requirements:
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 248/248L Principles of Ecology with Lab

BIOL 335/335L Principles of Wildlife Biology with Lab
GEOG 216 Geographic Information Systems

## One (1) course from Cell and Molecular Systems:

BIOL 228/228L Microbiology with Lab
BIOL 260/260L Cellular Biology with Lab
BIOL 262/262L Molecular Biology with Lab
BIOL 432 Vertebrate Development

## Two (2) courses from Organismal and Physiological Systems

BIOL 212/212L Wildlife Specimen Preparation Techniques
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 235/235L Principles of Human Physiology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab
BIOL 242/242L Human Anatomy and Physiology II with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 323 Biology and Conservation of Crocodiles
NEUR 225 Biopsychology
NEUR 306 Neurophysiology
Two (2) courses from Ecological Systems:
BIOL 203 Plants and Society
BIOL 233/233L Comparative Vertebrate Anatomy with Lab
BIOL 320/320L Animal Behavior with Lab
BIOL 321/321L Limnology with Lab
BIOL 344/344L Animal Physiological Ecology with Lab
BIOL 381 Theories of Infectious Diseases
BIOL 393 Wildlife Management and Conservation Topics
One (1) course from the following list of Restricted Electives:
CSCI 156 Python Programming for Applications
ENVS 333 Digital Field Methods: Drones, Data, \& Artificial Intelligence
GEOG 240 Municipal Land Use
GEOG 316 Advanced Geographic Information Systems
GEOG 375 Sustainable Management of Natural Resources

## MINORS

## MINOR IN BIOLOGY (5 COURSES):

An introductory biology laboratory course, a chemistry laboratory course and a minimum of three
(3) biology courses which must be $200-\mathrm{level}$ and above. A minimum of two (2) must have a laboratory. All courses must be chosen under the guidance of a member of the Biology Department. If college credit is received for either an examination or advanced placement, the introductory course requirement shall be waived. At least three (3) of the courses must be taken in residence at Framingham State University.

## MINOR IN NEUROSCIENCE (5 COURSES)

Neuroscience is the study of the nervous system, the cells and tissues of which it consists; the thoughts, emotions and behaviors that it manifests and the way it changes due to stimuli from both inside and outside the body. It is an interdisciplinary science that combines aspects of Biology, Psychology, Philosophy, and Chemistry. Neuroscientists examine the development, structure and function of the nervous system, what happens in disease states and mental illness and how different compounds can alter its activity.

Students interested in a minor in Neuroscience should see the chair of either the Biology Department or the Psychology and Philosophy Department.

Please see the Interdisciplinary section of the catalog for course requirements.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

BIOL 101 Biological Concepts with Lab
BIOL 103 Biological Perspectives on Environmental Issues
BIOL 109 Introduction to Biological Science with Lab
BIOL 114 A Human Perspective on Genetics
BIOL 130 Principles of Biology with Lab
BIOL 142 Introduction to Human Biology with Lab
BIOL 203 Plants and Society
RAMS 101BI First-Year Seminar: Biological Perspectives
RAMS 102BI First-Year Seminar: Biological Science and Society
RAMS 101NE First-Year Seminar: Topics in Neuroscience

# Chemistry and Food Science 

## Chair: Steven Cok

\author{

Professor: Steven Cok, Catherine Dignam, Sarah J. Pilkenton <br> | Associate Professor: | Emmanouil Apostolidis, Dwayne A. Bell, |
| :--- | :--- |
|  | Vinay Mannam, Ishara A. Mills-Henry, Shelli Waetzig | <br> Assistant Professors: Chantrell Frazier, Argyroula Stamatopoulou** <br> Instructor: <br> Lisa Savini

}
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The Department of Chemistry and Food Science is unique in that it offers strong majors in Biochemistry, Chemistry, and Food Science. The programs complement one another, producing Food Science majors with an exceptionally strong background in chemistry and providing Chemistry and Biochemistry majors with the opportunity to take electives in more applied areas such as food chemistry and food analysis. Undergraduate research opportunities are also enhanced by the combination of these program areas. An excellent undergraduate education is provided by the structured curricula for the Chemistry, Biochemistry, and Food Science majors coupled with a strong general education component. The strength of these programs is clearly indicated by the excellent graduate school placement, achievement records, and employment opportunities enjoyed by graduates.

## Pre-Health Program

A pre-health curriculum for pre-medical, pre-dental, and pre-veterinary studies is also offered in cooperation with the Biology Department.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-B (Natural Sciences) and laboratory requirement are satisfied through the completion of the Biochemistry, Chemistry, and Food Science majors.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## BIOCHEMISTRY MAJOR (U_BC)

The Biochemistry major has two concentrations: American Chemical Society (ACS) approved concentration and General Biochemistry concentration. Both concentrations in this major allow students to select courses covering a wide range of topics in chemistry and biology.

## Major Core Requirements (15)

The following fifteen (15) core requirements are required of Biochemistry majors in all concentrations:

BIOL 130/130L Principles of Biology with Lab or
BIOL 135/135L Foundations of Biological Science with Lab

Choose Two (2) courses from the following:
BIOL 208/208L Genetics with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 301/301L Biochemistry I with Lab
CHEM 303/303L Physical Chemistry I with Lab
CHEM 321/321L Instrumental Analysis with Lab
CHEM 332/332L Biochemistry II with Lab
MATH 219 Calculus I
MATH 220 Calculus II
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab

## CONCENTRATIONS

All students majoring in Biochemistry must choose one (1) of the two (2) concentrations: ACS-Approved Program or General Biochemistry.

## AMERICAN CHEMICAL SOCIETY APPROVED CONCENTRATION (UBCA)

## Concentration Requirements (4):

CHEM 401/401L Inorganic Chemistry with Lab
CHEM 480 Chemical Research I
CHEM 481 Chemical Research II
Choose one (1) elective course from:
BIOL 208/208L Genetics with Lab* or
BIOL 260/260L Cell Biology with Lab* or
BIOL 262/262L Molecular Biology with Lab*
CHEM 304/304L Physical Chemistry II with Lab
CHEM 390 Special Topics in Chemistry
FDSC 405/405L Food Analysis with Lab
FDSC 408/408L Food Chemistry with Lab
*Note: BIOL 208/208L Genetics with Lab, BIOL 260/260L Cell Biology with Lab, and BIOL 262/262L Molecular Biology with Lab cannot be used as both a major core requirement and concentration elective.

## GENERAL BIOCHEMISTRY CONCENTRATION (UBCG)

## Concentration Requirements (4):

Choose four (4) elective courses from:
BIOL 208/208L Genetics with Lab* or
BIOL 260/260L Cell Biology with Lab* or
BIOL 262/262L Molecular Biology with Lab*
BIOL 228/228L Microbiology with Lab
BIOL 400 Trends in Biotechnology
BIOL 426 Human Immunity
BIOL 432 Vertebrate Development
CHEM 304/304L Physical Chemistry II with Lab
CHEM 390 Special Topics in Chemistry
CHEM 401/401L Inorganic Chemistry with Lab
CHEM 480 Chemical Research I
CHEM 481 Chemical Research II
FDSC 405/405L Food Analysis with Lab
FDSC 408/408L Food Chemistry with Lab
*Note: BIOL 208/208L Genetics with Lab, BIOL 260/260L Cell Biology with Lab, and BIOL 262/262L Molecular Biology with Lab cannot be used as both a major core requirement and concentration elective.

## CHEMISTRY MAJOR (U_CH)

The Chemistry major offers two concentrations: one is approved by the American Chemical Society (ACS) and the other is a general chemistry concentration. The ACS-approved curriculum allows flexibility to specialize in a particular area through choice of the elective, the advanced course, and the senior research project. The General Chemistry concentration requires a minor.

## Major Core Requirements (8)

The following eight (8) core requirements are required of Chemistry majors in all concentrations:
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
MATH 219 Calculus I
MATH 220 Calculus II
PHYS 211/221L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab

## CONCENTRATIONS

All students majoring in Chemistry must choose one (1) of the two (2) concentrations: ACSApproved Program or General Chemistry.

## AMERICAN CHEMICAL SOCIETY APPROVED CONCENTRATION (UCHA)

## Concentration Requirements (11):

CHEM 301/301L Biochemistry I with Lab
CHEM 303/303L Physical Chemistry I with Lab
CHEM 304/304L Physical Chemistry II with Lab
CHEM 321/321L Instrumental Analysis with Lab
CHEM 401/401L Inorganic Chemistry with Lab
CHEM 480 Chemical Research I
CHEM 481 Chemical Research II
CSCI 120 Introduction to Information Technology
Choose one (1) Advanced Chemistry course from:
CHEM 332/322L Biochemistry II with Lab
CHEM 390 Special Topics in Chemistry

## Choose two (2) electives from:

COMM 215 Science Communication
CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 130 Computer Science I Using Java
CSCI 215 Computer Science II Using Java
CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {TM }}$
ENGL 286 Professional Writing
ENGL 311 Writing About Science
ENGL 372 Technical Writing
ENVS 202 Data Analysis for Scientists
MATH 206 Discrete Mathematics I
MATH 221 Calculus III
MATH 226 Linear Algebra and Applications
STAT 157 Probability and Statistics or
STAT 203 Statistics for the Natural Sciences

## GENERAL CHEMISTRY CONCENTRATION (UCHG)

## Concentration Requirements (6):

CHEM 303/303L Physical Chemistry I with Lab
CHEM 321/321L Instrumental Analysis with Lab
CHEM 401/401L Inorganic Chemistry with Lab
CSCI 120 Introduction to Information Technology
Choose two (2) chemistry elective courses from:
CHEM 301/301L Biochemistry I with Lab
CHEM 304/304L Physical Chemistry II with Lab
CHEM 390 Special Topics in Chemistry
FDSC 405/405L Food Analysis with Lab
FDSC 408/408L Food Chemistry with Lab
NOTE: A minor is required with the General Chemistry concentration.

## PROGRAM IN EDUCATION

Chemistry majors with a concentration in either General Chemistry or Biochemistry may minor in secondary education to obtain Initial licensure at the high school level. Students choosing to minor in secondary education must take CHEM 301 Biochemistry I.

## FOOD SCIENCE MAJOR (U_FS)

All students majoring in Food Science must choose one (1) of the two (2) concentrations: Applied Food Science of Food Science and Technology.

## Major Core Requirements (13)

The following thirteen (13) core requirements are required of Food Science majors in all concentrations:

BIOL 130/130L Principles of Biology with Lab
BIOL 228/228L Microbiology with Lab
BIOL 235/235L Principles of Human Physiology with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 301/301L Biochemistry I with Lab
FDSC 100 Orientation to Food Science and Food Industry ( 0.25 course credit)
FDSC 161/161L Introduction to Food Science and Technology with Lab or
FDSC 151 Principles of Food Science
FDSC 200 Seminars in Food Science ( 0.25 course credit)
FDSC 300 Professional Development in Food Science ( 0.25 course credit)
FDSC 351/351L Food Engineering and Processing with Lab
FDSC 400 Transition to Food Science Career ( 0.25 course credit)

FDSC 405/405L Food Analysis with Lab
FDSC 408/408L Food Chemistry with Lab
STAT 203 Statistics for the Natural Sciences or
STAT 117 Introduction to Statistics or
ENVS 202 Data Analysis for Scientists

## Food Science Concentrations

## APPLIED FOOD SCIENCE CONCENTRATION (UFSA)

## Concentration Requirements (2):

MATH 180 Precalculus or
MATH 219 Calculus I
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab
NOTE: A minor is required with the Applied Food Science concentration.

## FOOD SCIENCE AND TECHNOLOGY CONCENTRATION (UFST)

## Concentration Requirements (8):

CHEM 303/303L Physical Chemistry I with Lab
FDSC 413/413L Food Safety and Microbiology with Lab
FDSC 495 Food Industrial Practicum or
FDSC 490 Independent Study in Food Science or
CHEM 304/304L Physical Chemistry II with Lab
MATH 219 Calculus I
MATH 220 Calculus II
NUTR 374 Human Nutrition Science
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab

## MINORS

## MINOR IN BIOCHEMISTRY (6 COURSES)

CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 301/301L Biochemistry I with Lab
CHEM 332/332L Biochemistry II with Lab

## MINOR IN CHEMISTRY (6 COURSES)

CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
Choose two (2) of the following courses:
CHEM 301/301L Biochemistry I with Lab
CHEM 303/303L Physical Chemistry I with Lab
CHEM 304/304L Physical Chemistry II with Lab
CHEM 321/321L Instrumental Analysis with Lab
CHEM 390 Special Topics in Chemistry
CHEM 401/401L Inorganic Chemistry with Lab

## MINOR IN FOOD SCIENCE (7 COURSES)

Required courses:
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 300/300L Principles of Biochemistry with Lab
FDSC 151 Principles of Food Science or
NUTR 364/364L Experimental Study of Food
Choose two (2) of the following:
FDSC 351/351L Food Engineering and Processing with Lab
FDSC 405/405L Food Analysis with Lab
FDSC 408/408L Food Chemistry with Lab
FDSC 413/413L Food Safety and Microbiology with Lab

COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)
Courses
Domain
CHEM 101 Chemistry of Life
CHEM 103 Introductory Chemistry II-B

CHEM 107 Principles of Chemistry
II-B, Lab

CHEM 108 Principles of Chemistry \& Quantitative Analysis II-B, Lab
CHEM 131 Science - Environment and Health
II-B, Lab
FDSC 151 Principles of Food Science
II-B
FDSC 161 Introduction to Food Science and Technology
II-B, Lab
RAMS 101CH First-Year Seminar: Topics in Chemistry
II-B
RAMS 101FS First-Year Seminar: Topics in Food Science II-B

# Communication, Media, and Performance 

Chair: Niall Stephens

Professors: M. Catherine (Kate) Caffrey, Sarah Cole, Audrey Kali
Associate Professors: Niall Stephens
Assistant Professors: Zahedur Arman
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The Department of Communication, Media, and Performance is positioned to meet the needs of students entering the complexities of the 21st century landscape where new career paths are emerging. Expertise in various contexts of communication will be paramount. The next decades will be an increasingly complex interplay of communication, media and performance in the contexts of both real and virtual social groups, organizations, and professional careers. This major prepares students to balance the demands of fast-paced communication technologies with the ongoing need for face-to-face human dialogue. Thus, the goal of the department is to provide students with a balanced perspective from which they may explore the nature of human communication.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain I-B (Humanities) is satisfied through the completion of the Communication Arts major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## COMMUNICATION ARTS MAJOR (U_CM)

## Major Core Requirements (6 courses)

COMM 115 Human Communication
COMM 130 Visual Communication
COMM 145 The Creative Process
COMM 224 Voice and Movement
COMM 250 Media/Society/Self
COMM 450 Seminar in Communication, Media, and Performance

COMMUNICATION ARTS CONCENTRATION:

## COMMUNICATION STUDIES (UCMG)

## The Major Core plus the following Concentration requirements (8 courses):

## Required Electives Group A: Communication Studies/Professional Communication

 (4 Required)Choose any four (4) courses from the lists below, (two (2) of which must be at the 300or 400-level)

## Communication Studies

COMM 202 Global Media
COMM 215 Science Communication
COMM 220 Mass Communication
COMM 234 Intercultural Communication
COMM 242 Environmental Communication
COMM 255 Special Topics in Communication, Media, and Performance
COMM 259 African Americans in Television and Radio
COMM 308 Media Criticism: Principles and Practice
COMM 322 Persuasion and Social Influence
COMM 324 Rhetoric and Popular Culture
COMM 490 Independent Study in Communication, Media, and Performance
COMM 495 Internship in Communication, Media, and Performance
Professional Communication
COMM 107 Effective Speaking
COMM 205 Small Group Communication
COMM 207 Interpersonal Dialogue
COMM 213 Advanced Effective Speaking
COMM 231 Advertising Techniques
COMM 237 Communication and Leadership
COMM 255 Special Topics in Communication, Media, and Performance
COMM 275 Public Relations
COMM 297 Communication and Social Media
COMM 303 Organizational Communication
COMM 328 Argumentation and Advocacy
COMM 357 Strategic Communication
COMM 490 Independent Study in Communication, Media, and Performance
COMM 495 Internship in Communication, Media, and Performance

## Required Electives Group B: Media Production/Performance (4 Required)

Choose any four (4) courses from the lists below, (two (2) of which must be at the 300or 400-level)

## Media Production

COMM 206 Experimental Film Production
COMM 209 Audio Production: Podcasting
COMM 226 Writing for Visual Media
COMM 255 Special Topics in Communication, Media, and Performance
COMM 262 Television Studio Production
COMM 280 Introduction to Film Production

COMM 309 Video Editing and Effects

COMM 312 Screenwriting
COMM 317 Video Production: Vlogging
COMM 366 Documentary Filmmaking
COMM 380 Advanced Film Production
COMM 410 Senior Portfolio in Film Production
COMM 490 Independent Study in Communication, Media, and Performance
COMM 495 Internship in Communication, Media, and Performance

## Performance

COMM 180 Introduction to Theatre Studies
COMM 201 Oral Interpretation of Literature
COMM 214 Introduction to Acting
COMM 255 Special Topics in Communication, Media, and Performance
COMM 264B Theatre Production - Backstage
COMM 264O Theatre Production - Onstage
COMM 364 Aspects of Theatre
COMM 414 Scene Study
COMM 490 Independent Study in Communication, Media, and Performance
COMM 495 Internship in Communication, Media, and Performance

## MINORS

## MINOR IN BLACK STUDIES (BST) (5 COURSES)

The Black Studies minor offers an interdisciplinary course of study across the humanities and social sciences. In so doing, it gives students an opportunity to pursue their own interests in Black culture and history in the United States, while at the same time offering an exploration of the implications of the African Diaspora. The core courses give students the foundation to understand Blackness in the United States, and the electives offer a range of courses that students can select depending on their choice of focus. This minor will enable students, regardless of their chosen major, to become more cognizant of how understanding Blackness in the United States is essential to citizenship in a participatory democracy. Students take two (2) core classes and choose three (3) courses from among different departments.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN COMMUNICATION ARTS (COM) (5 COURSES)

Students must complete five (5) courses from the following:

## Required:

COMM 115 Human Communication
Choose four (4) courses from the Communication, Media, and Performance curriculum, with the advice of a member of the Communication, Media, and Performance Department.

Students must complete five (5) course from the following:

## Required:

COMM 226 Writing for Visual Media
COMM 280 Introduction to Film Production
Plus choose three (3) of the following:
COMM 206 Experimental Film Production
COMM 262 Television Studio Production
COMM 309 Video Editing \& Effects
COMM 312 Screenwriting
COMM 317 Video Production: Vlogging
COMM 366 Documentary Filmmaking
COMM 380 Advanced Film Production

## MINOR IN STRATEGIC COMMUNICATION (SCT) (5 COURSES)

The Minor in Strategic Communication focuses on the theories, concepts, and practices related to communication in diverse organizational and professional settings. Students explore a broad range of topics, including public relations, advertising, organizational communication, crisis communication, campaigns, multimedia content creation, and social media. This minor aims to help students practice creating and implementing effective communication strategies designed to achieve commercial, non-profit, or governmental institutional goals. Courses encourage students to develop critical thinking and problem-solving skills by analyzing case studies, engaging in group projects, and conducting research. Students also exercise their written and verbal communication skills by producing a range of communication materials, including press releases, social media posts, multimedia contents, speeches, and reports.

Students must complete five (5) courses from the following:
Three (3) core courses:
COMM 3575 Strategic Communication
COMM 297 Communication and Social Media
COMM 231 Advertising Techniques or COMM 275 Public Relations

## Choose One (1) of the following courses:

ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 286 Professional Writing
ENGL 311 Writing About Science
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 377 Writing for Online and Social Media

## Choose One (1) of the following courses:

MRKT 181 Marketing Principles
MRKT 218 Personal Branding and Business Etiquette
MRKT 240 Consumer Behavior
MRKT 301 Brand Management
MRKT 308 Digital and Social Media Marketing
MRKT 310 Marketing Research
MRKT 313 Advertising and Promotions
MRKT 480 Strategic Marketing
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 308 Managing Across Cultures

Students must complete five (5) courses from the following:

## Required:

COMM 180 Introduction to Theatre Studies

## Choose four (4) of the following:

COMM 201 Oral Interpretation of Literature
COMM 214 Introduction to Acting
COMM 264 Theatre Production*
COMM 364 Aspects of Theatre*
COMM 414 Scene Study
*Note: Please see course descriptions as these courses may be taken twice, provided the content is different.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

Courses
COMM 107 Effective Speaking
COMM 115 Human Communication
COMM 130 Visual Communication I-B

COMM 180 Introduction to Theatre Studies III-B
COMM 201 Oral Interpretation of Literature I-B
COMM 202 Global Media III-C
COMM 207 Interpersonal Dialogue III-B
COMM 214 Introduction to Acting I-A
COMM 215 Science Communication III-B
COMM 226 Writing for Visual Media I-A
COMM 259 African Americans in Television and Radio I-B
COMM 262 Television Studio Production I-A
COMM 280 Introduction to Film Production I-A
RAMS 101CM First-Year Seminar: The Power of Communication III-B

# Computer Science 

## Chair: Satish Penmatsa

Professors: Zhenguang (Jeff) Gao, Suban Krishnamoorthy<br>Associate Professors: Cornelia (Conny) Breuning, Satish Penmatsa<br>Assistant Professors: David Keil, Mehrdad (Mike) Nourai

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The Department offers courses leading to a Bachelor of Science in Computer Science with concentrations in Computer Science, and Information Systems, both offered with or without a fulltime six-month cooperative education experiences. Also offered are minors in Computer Science, Enterprise Systems, Information Systems, Information Technology. The goal of these programs is to train graduates for successful careers in industry and to prepare students for graduate studies. Students are encouraged to participate in either internships or cooperative education experiences as either option provides students with invaluable experience in real-world problem solving and enhance their academic learning as well as their postgraduate employment opportunities.

## The General Education Requirement:

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-A (Analysis, Modeling, and Problem Solving) requirement is satisfied through the completion of the Computer Science major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## COMPUTER SCIENCE MAJOR (U_CS)

## Departmental Requirements

Computer Science majors must complete core requirements as well as additional requirements for the particular concentration chosen (see below).

The following eight (8) Core Requirements are mandatory of Computer Science majors in all concentrations:

CSCI 120 Introduction to Information Technology
CSCI 130 Computer Science I Using Java
CSCI 200 Computer Science Professional Exploration Seminar
( 0.5 course-credit)
CSCI 215 Computer Science II Using Java
CSCI 258 Introduction to Operating Systems using UNIX ${ }^{\text {TM }}$
CSCI 360 Database Management
MATH 206 Discrete Mathematics I
STAT 117 Introduction to Statistics

## CONCENTRATIONS

All students majoring in Computer Science must choose one (1) of the four (4) concentrations:

Computer Science General (UCSG)
Computer Science General with Cooperative Experience (UCSC)
Information Systems (UCSI)
Information Systems with Cooperative Experience (UCSO)

## CONCENTRATION IN COMPUTER SCIENCE (UCSG) (12)

This concentration prepares students for careers in software development.

## Required Concentration Core courses (8):

CSCI 271 Data Structures
CSCI 317 Discrete Structures*
CSCI 347 Analysis of Algorithms
CSCI 352 Computer Architecture \& Assembly Language
CSCI 362 Software Engineering
CSCI 460 Theory of Computing
CSCI 465 Operating Systems Internals
CSCI 477 Computer Networking
*MATH 330 Discrete Mathematics II may be substituted for CSCI 317 Discrete Structures

## Choose Three (3) Computer Science Electives:

CSCI 300 Artificial Intelligence
CSCI 308 Python Programming
CSCI 320 Windows Server \& Client Management
CSCI 333 Object-Oriented Programming Using C++
CSCI 340 UNIX System Administration
CSCI 345 Computer \& Network Security
CSCI 373 Advanced Web Technologies
CSCI 400 Special Topics in Computer Science
CSCI 490 Independent Study in Computer Science
CSCI 495 Internship in Computer Science

## One (1) Science Laboratory Courses:

BIOL 130/130L Principles of Biology with Lab
CHEM 107/107L Principles of Chemistry with Lab
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab
PHYS 201/201L Physics for Earth and Life Scientists with Lab
PHYS 211/211L Principles of Physics I with Lab

## CONCENTRATION IN COMPUTER SCIENCE WITH COOPERATIVE EXPERIENCE (UCSC)

This concentration integrates two (2) full-time six-month cooperative work experiences with the required courses for the Concentration in Computer Science. These cooperative work experiences allow students to apply and further investigate the discipline of computer science. This concentration prepares students for careers in software development.

Concentration Entrance Requirements - Students must:

- Maintain a minimum overall GPA of 2.80;
- Maintain a 3.00 GPA in all Computer Science courses;
- Complete and submit the cooperative experience application during the semester prior to enrolling in CSCI 310 Cooperative Experience I Transfer students must complete three (3) Computer Science courses at Framingham State University prior to participating in CSCI 310 Cooperative Experience I;
- Have junior standing at the time of the first cooperative experience.


## Required Concentration Core courses (10):

CSCI 271 Data Structures
CSCI 310 Computer Science Cooperative Experience I (3 course-credits)
CSCI 317 Discrete Structures*
CSCI 347 Analysis of Algorithms
CSCI 352 Computer Architecture \& Assembly Language
CSCI 362 Software Engineering
CSCI 410 Computer Science Cooperative Experience II (3 course-credits)
CSCI 460 Theory of Computing
CSCI 465 Operating Systems Internals
CSCI 477 Computer Networking
*MATH 330 Discrete Mathematics II may be substituted for CSCI 317 Discrete Structures

## Choose Three (3) Computer Science Electives:

CSCI 300 Artificial Intelligence
CSCI 308 Python Programming
CSCI 320 Windows Server \& Client Management
CSCI 333 Object-Oriented Programming Using C++
CSCI 340 UNIX System Administration
CSCI 345 Computer \& Network Security
CSCI 373 Advanced Web Technologies
CSCI 400 Special Topics in Computer Science
CSCI 490 Independent Study in Computer Science
CSCI 495 Internship in Computer Science
One (1) Science Laboratory Courses:
BIOL 130/130L Principles of Biology with Lab
CHEM 107/107L Principles of Chemistry with Lab
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab
PHYS 201/201L Physics for Earth and Life Scientists with Lab
PHYS 211/211L Principles of Physics I with Lab

## CONCENTRATION IN INFORMATION SYSTEMS (UCSI) (12)

This concentration trains students for technical careers in information systems such as database administration, network administration, systems analysis and design, and software quality assurance.

## Required Concentration Core courses (4):

CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 345 Computer and Network Security
CSCI 373 Advanced Web Technologies
CSCI 376 Networking Technologies

## Five (5) required Business Courses:

ACCT 220 Introduction to Financial Accounting
BUIS 411 Information Systems Research
BUIS 460 Information Systems Management
ECON 101 Principles of Macroeconomics OR
ECON 102 Principles of Microeconomics
MGMT 280 Organizational Behavior

## Three (3) courses from at least two (2) of the following categories:

Network and System Administration:
CSCI 320 Windows Server and Client Management
CSCI 340 UNIX ${ }^{\text {TM }}$ System Administration
Computer Graphics and Technical Writing:
CSCI 140 Introduction to the Internet, Graphics and Multimedia
ENGL 286 Professional Writing
ENGL 371 Business Writing
ENGL 372 Technical Writing
General Information Systems Electives:
Any computer science courses at the 200-level and above except:
Courses listed in the Network and Systems Administration category or
CSCI 490 Independent Study in Computer Science
CSCI 495 Internship in Computer Science

## CONCENTRATION IN INFORMATION SYSTEMS WITH COOPERATIVE EXPERIENCE (UCSO)

This concentration integrates two (2) full-time six-month cooperative work experiences and one (1) cooperative experience seminar with the required courses for the Concentration in Information Systems. These cooperative work experiences allow students to apply and further investigate the discipline of computer science.

Concentration Entrance Requirements:
Students must

- Maintain a minimum overall GPA of 2.80;
- Maintain a 3.00 GPA in all Computer Science courses;
- Complete and submit the cooperative experience application during the semester prior to enrolling in CSCI 310 Cooperative Experience I Transfer students must complete three (3) Computer Science courses at Framingham State University prior to participating in CSCI 310 Cooperative Experience I;
- Have junior standing at the time of the first cooperative experience; and


## Required Concentration Core courses (6):

CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 310 Computer Science Cooperative Experience I (3 course-credits)
CSCI 345 Computer and Network Security
CSCI 373 Advanced Web Technologies
CSCI 376 Networking Technologies
CSCI 410 Computer Science Cooperative Experience II (3 course-credits)

## Five (5) required Business Courses:

ACCT 220 Introduction to Financial Accounting
BUIS 411 Information Systems Research
BUIS 460 Information Systems Management
ECON 101 Principles of Macroeconomics OR
ECON 102 Principles of Microeconomics
MGMT 280 Organizational Behavior
Three (3) courses from at least two (2) of the following categories:
Network and System Administration:
CSCI 320 Windows Server and Client Management
CSCI 340 UNIX ${ }^{\text {TM }}$ System Administration
Computer Graphics and Technical Writing:
CSCI 140 Introduction to the Internet, Graphics and Multimedia
ENGL 286 Professional Writing
ENGL 371 Business Writing
ENGL 372 Technical Writing
General Information Systems Electives:
Any computer science courses at the 200 -level and above except:
Courses listed in the Network and Systems Administration category or
CSCI 490 Independent Study in Computer Science
CSCI 495 Internship in Computer Science

## BUSINESS AND INFORMATION TECHNOLOGY MAJOR (UITB)

(Home Department - Management and Business \& Information Technology)
This major is a collaboration with the Management and Business \& Information Technology and Computer Science departments and provides students with knowledge in both the business and information technology fields. The intent of this program is to prepare the Business and Information Technology program can "bridge the gap" between technology and business. As entry level workers, they are likely to qualify for jobs as systems analysts, Project Management Office administrators, technical trainers, quality assurance analysts and similar roles. As experienced workers, they are likely to move into Project Management, Delivery Assurance and IT Management roles.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINORS

## MINOR IN COMPUTER SCIENCE (5 COURSES)

## Required Courses (4):

CSCI 120 Introduction to Information Technology
CSCI 130 Computer Science I Using Java
CSCI 215 Computer Science II Using Java
CSCI 258 Introduction to Operating Systems Using UNIX ${ }^{\text {тм }}$

## Elective (1):

One other course from the Computer Science Department.

## MINOR IN INFORMATION SYSTEMS (5 COURSES)

Required Courses (5) - Select from any courses offered through the Computer Science Department. At least one (1) of these courses must be at the 200-level or above. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No course may fulfill both major and minor requirements, but courses in the minor may be used to fulfill general education requirements. No Information Systems minor will be awarded without compliance with the above format.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN INFORMATION TECHNOLOGY (5 COURSES)

The University offers an interdisciplinary minor in Information Technology. To earn a minor in Information Technology, students must apply in writing to the Chair of the Computer Science Department. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No course may fulfill both major and minor requirements, but courses in the minor may be used to fulfill general education requirements. No Information Technology minor will be awarded without compliance with the above format.
Please see the Interdisciplinary section of the catalog for course requirements.

## Courses Appropriate for General Education (Gen. Ed.)

Courses
Domain
CSCI 108 HTML, JavaScript Programming, and Web ..... I-ASite Development
CSCI 111 Computational Thinking: Building Robots and Games ..... II-A
CSCI 120 Introduction to Information Technology ..... II-A
CSCI 130 Computer Science I Using Java ..... II-A
CSCI 135 Information Technology and Society ..... III-B
CSCI 138 Information Technology and the Environment ..... III-C
CSCI 140 Introduction to the Internet, Graphics, and Multimedia ..... I-A

## Education

## Chair: James Cressey

| Professors: | James Cressey**, May T. Hara, Kelly Kolodny, <br> Julie A. Zoino-Jeannetti |
| :--- | :--- |
| Associate Professors: | Susan Donnellan, Chu Ly, <br> Folashade (Shadé) Solomon |
| Assistant Professors: | Laura Hudock**, Wardell A. Powell |

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

Adjunct Faculty

| Professors: | Kelly Matthews, Robert Page, Jr. |
| :--- | :--- |
| Associate Professors: | Lori Bihler |
| Assistant Professors: | Holly Pearson |
| Field Placement Coordinator: | Sandra Shaw |

The Education Department offers a Bachelor of Science (B.S.), with a major in Child and Family Studies as well as Bachelor of Science in Education (B.S.Ed.) with majors in Early Childhood Education and in Elementary Education. Students may pursue Initial Educator Licensure in Massachusetts by completing either the Licensure concentration offered in either Early Childhood Education and Elementary Education or through one of the Secondary Education minors that are available.

The General Education Requirement
All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of the Child and Family Studies major.

The courses listed below, with subjects related to the Massachusetts Curriculum Frameworks, are required for students majoring in either Early Childhood Education or in Elementary Education.

Common Core:
ENWR 110 Composition II
MATH 110 Mathematics for Elementary Educators I
Domain I-A:
Any Course from Domain I-A
Domain I-B:
Any Course from Domain I-B
Domain I-C:
Any Elementary or Intermediate Language Course
Domain II-A:
MATH 120 Mathematics for Elementary Educators II
Domain II-B (Two (2) courses required):
BIOL 101 Biological Concepts
PHSC 109 Introduction to Physical Science
Domain III-A:
HSTY 111 United States History to Reconstruction
Domain III-B:
PSYC 200 Psychology of Development
Domain III-C (courses required):
GEOG 110 World Regional Geography

## Teacher Licensure Study of the Constitutions Requirement

All students pursing teacher licensure must take one course that includes study of both United States and Massachusetts constitutions, to be chosen from among the following courses.

EDUC 200 Foundations of Secondary Education with Pre-Practicum I<br>HSTY 111 United States History to Reconstruction<br>HSTY 112 United States History since Reconstruction<br>HSTY 165 Slavery, Race, and Rights in American History<br>HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age of Revolutions, 17501850

POSC 110 Introduction to American Politics
POSC 211 Political Theory: Justice, Law, and Order
POSC 250 American Legal Systems

## Teacher Preparation Program Information

Framingham State University, the first public institution in America to offer teacher preparation, continues to be in the forefront in teacher education, most recently in the area of teaching with technology. Teacher preparation students use laptops and digital cameras in their technology-enhanced courses and student teaching. The teacher preparation programs include a series of pre-practicum courses that enable students to address subject matter defined in the Massachusetts Curriculum Frameworks while preparing for the student teaching experience. The success rate of our students on the Massachusetts Test for Educator Licensure is rooted in a strong liberal arts and sciences curriculum, supported by excellent education courses and academic support services that include test preparation workshops. All programs of teacher preparation at the University are approved by the Commonwealth of Massachusetts.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Programs Leading to Educator Licensure

At Framingham State University, students will meet the requirements for the Initial license as an Early Childhood Teacher (Pre-K-2) or Elementary Teacher (1-6) through completion of the major in Early Childhood Education with the concentration in Initial Licensure or the major in Elementary Education with the concentration in Initial Licensure.

In addition to requirements in these three areas, all candidates for educational licensure shall be required to pass the Massachusetts Test for Educator Licensure (MTEL), which will assess communication and literacy skills; subject matter knowledge; and foundations of reading. The Massachusetts Test for Educator Licensure is administered in the months of September, November, February, May, and July. The University will comply with statemandated licensure requirements, which are subject to change.

Secondary Education students minoring in Education may obtain an Initial license in the following fields: studio art, biology, chemistry, English, history, mathematics, Spanish. Students may obtain middle school level licensure in earth science (5-8) or in the secondary subjects listed above with the completion of additional requirements. Since 1998, students seeking initial licensure at any level have been required to obtain a satisfactory score on the Massachusetts Test for Educator Licensure (MTEL).

## Bachelor's/Master of Education with a concentration in Special Education Moderate Disabilities (B/MEd)

This program combines an undergraduate degree with this master's concentration to prepares candidates to work with children and young adults with diverse learning needs. Candidates learn to support literacy and numeracy development, communication skills, and social \& emotional learning of students with moderate disabilities Grades PreK-8 or 5-12. This is a program for education majors and minors, however, other related fields can be considered with the approval of the Advisor. This program leads to an initial license as a Teacher of Students with Moderate Disabilities in Grades PreK-8 or Grades 5-12.

Requirements for Admission into the Graduate program:

- Submit 4+1 Program Specific Application to the master's program - this should be submitted at the end of the sophomore year;
- Two (2) letters of recommendation - at least one (1) of which must be from an Education Department faculty member;
- A typed, 300-word personal statement discussing your motivation for seeking a master's degree in Moderate Disabilities;
- Junior status with an overall GPA of 3.00;
- Passing scores on the Communication and Literacy exam.
- For continuation into the 5th year all licensure specific MTEL exams must be passed.


## Child and Family Studies Major (U_FC)

The Education Department offers a Bachelor of Science with a major in Child and Family Studies. This major prepares students in the areas of two concentrations. (1) Students prepare to work as early childhood educators (ages birth to 8 ) in the mixed delivery system, including in early intervention, private and public pre-school settings, family child care centers, Head Start, and out-of-school child care settings. (2) They also may prepare to work as community-based educators. Within the Child and Family Studies major, a strong focus is placed on family involvement, family engagement, and collaboration across families, educational settings, and communities. It is recognized that by working together, families, educators, and communities support the holistic development and education of children and can prepare children from varied socio-economic, cultural, and geographic backgrounds for a promising future. Students who complete the Early Education and Care concentration of this major will be eligible to apply for their infant, toddler, or preschool teaching certification from the Massachusetts Department of Early Education and Care (EEC). Students also are prepared to assume leadership roles in the field as directors of early childhood centers or as staff with connected state level agencies. Students who complete the Community-Based Education concentration may pursue various educational roles in community-based centers. Students also are prepared for graduate studies in connected fields.

## Requirements for Major (U_FC):

## Required Core Courses ( 8 courses):

CFST 118 Child, Family, School, and Community: Connections and Collaborations
CFST 212 Disability in Society
CFST 321 Theory and Practice of Play
CFST 440 Research in Child and Family Studies
EDUC 205 Equity in Educational Settings
EDUC 305 Educational Policy
PSYC 200 Psychology of Development
or PSYC 201 Child Development
SOCI 212 Sociology of Families

## CONCENTRATIONS

## COMMUNITY-BASED EDUCATION (UFCC)

Required Concentration Core (4):
CFST 333 Community-based Education
CFST 495 Internship in Child and Family Studies
Choose Two (2) of the following:
CFST 390 Special Topics in Child and Family Studies
CFST 490 Independent Study in Child and Family Studies
EDUC/SOCI 350 Education and Social Change
PSYC 212 Adolescent Psychology
PSYC 231 Adult Development
PSYC 271 Principles of Behavior Modification
SOCI 255 LGBTQ Communities in the United States
SOCI 306 Nonprofit Giving
SOCI 325 Health and Illness
SOCI 333 Society, Mental Health, and the Individual
SOCI 366 Death and Dying
EARLY EDUCATION AND CARE, BIRTH - 8 (UFCE)
Courses Focused on Curriculum and Administration of EEC Settings
Required Concentration Core (4):
CFST 301 Infant and Toddler Curriculum
CFST 311 Pre-school Curriculum: Language Development and Early Literacy
CFST 312 Pre-school Curriculum: Integrating Math, Science, Social Studies, and Art
CFST 405 Administration and Leadership of Early Education and Care Settings

## Early Childhood Education Major (U_EC)

## Required Core Courses (9 courses):

EDUC 110 Education in American Society Grades PreK-6
EDUC 205 Equity in Educational Settings
EDUC 230 Social-Emotional Learning
EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ECED 311 Teaching Mathematics Grades PreK-2 with Pre-Practicum I
ENGL 212 Children's Literature
HSTY 105 Europe and the World to circa 1450
PSYC 200 Psychology of Development

## Choose 1 of the following (literature courses with emphasis on diverse authors):

ENGL 240 LGBTQ Literature
ENGL 248 Literature of the Harlem Renaissance
ENGL 260 American Ethnic Literature
ENGL 263 African American Women Writers
ENGL 264 African American Literature
ENGL 275 Contemporary Latinx Literature

## CONCENTRATIONS

EARLY CHILDHOOD GRADES PRE-K - 2 LICENSURE (UECL) (8)
Required Concentration Core (4):
ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with Pre-Practicum II

EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with PrePracticum III
ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III

## The Practicum Semester (4 course credits):

ECED 440A Early Childhood Education Professional Practicum A (1 course-credit)
ECED 440B Early Childhood Education Professional Practicum B (2 course-credits)
EDUC 450 Principles of Educational Curriculum and Assessment

## EARLY CHILDHOOD NON-LICENSURE (UECG) (7)

## Required Concentration Core (3):

EDUC 215 Action Research in Education
EDUC 305 Educational Policy
EDUC/SOCI 350 Education and Social Change

## Concentration Electives (Choose 4):

Students may select four (4) of the following courses, at least two (2) of which must be at the 300level or above. Students who are considering returning for the post-baccalaureate teacher licensure (PBTL) program after graduating should take all four of the 300 -level EDUC courses with prepracticum experiences in the list below.

CFST 118 Child, Family, School, and Community: Connections and Collaborations
CFST 212 Disability in Society
CFST 390 Special Topics in Child and Family Studies
ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with Pre-Practicum II

ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with PrePracticum III

ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III
EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
EDUC 360 Special Topics in Education
EDUC 450 Principles of Educational Curriculum and Assessment
EDUC 490 Independent Study: Current Topics in Education
EDUC 495 Internship in Education
ENGL 212 Children's Literature
PSYC 236 Psychology of Learning
SOCI 312 Sociology of Childhood and Adolescence

## Elementary Education Major (U_EL)

## Required Core Courses (9 courses):

EDUC 110 Education in American Society Grades PreK-6
EDUC 205 Equity in Educational Settings
EDUC 230 Social-Emotional Learning
EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I
ENGL 212 Children's Literature
HSTY 105 Europe and the World to circa 1450
PSYC 200 Psychology of Development
Choose 1 of the following (literature courses with emphasis on diverse authors):
ENGL 240 LGBTQ Literature
ENGL 248 Literature of the Harlem Renaissance
ENGL 260 American Ethnic Literature
ENGL 263 African American Women Writers
ENGL 264 African American Literature
ENGL 275 Contemporary Latinx Literature

## CONCENTRATIONS

## ELEMENTARY GRADES 1-6 LICENSURE (UELL) (8)

## Required Concentration Core (4):

EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ELED 322 The Child and Literacy Grades 1-6 with Pre-Practicum II
ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III

ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III
The Practicum Semester (4 course credits):
ELED 440A Elementary Education Professional Practicum A (1 course-credit)
ELED 440B Elementary Education Professional Practicum B (2 course-credits)
EDUC 450 Principles of Educational Curriculum and Assessment

## ELEMENTARY NON-LICENSURE (UELG) (7)

## Required Concentration Core (3):

EDUC 215 Action Research in Education
EDUC 305 Educational Policy
EDUC/SOCI 350 Education and Social Change

## Concentration Electives (Choose 4):

Students may select four (4) of the following courses, at least two (2) of which must be at the 300level or above. Students who are considering returning for the post-baccalaureate teacher licensure (PBTL) program after graduating should take all four of the 300 -level EDUC courses with prepracticum experiences in the list below.

CFST 118 Child, Family, School, and Community: Connections and Collaborations
CFST 212 Disability in Society
CFST 390 Special Topics in Child and Family Studies
EDUC 342 Sheltered English Immersion PreK-6 with Pre-Practicum II

ELED 322 The Child and Literacy Grades 1-6 with Pre-Practicum II
ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III

ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III
EDUC 360 Special Topics in Education
EDUC 450 Principles of Educational Curriculum and Assessment
EDUC 490 Independent Study: Current Topics in Education
EDUC 495 Internship in Education
PSYC 236 Psychology of Learning
SOCI 312 Sociology of Childhood and Adolescence

## MINORS

## MINOR IN CHILD AND FAMILY STUDIES (FCS) (5 COURSES)

The Child and Family Studies Minor is designed for students interested in working with young children and their families as teachers or administrators in pre-school, childcare, early intervention or other community-based programs. This minor includes coursework in Child and Family Studies, Education, Psychology, and Sociology. Within this program of study, there is a strong focus placed on family involvement, family engagement, and collaboration across families, educational settings, and communities.

Students declaring the Child and Family Studies Minor are required to complete five (5) courses from the list below, two (2) of which must have the CFST designation. Students may only apply two (2) courses towards both their major and this minor.

## The minor requires five (5) courses from the following:

CFST 118 Child, Family, School, and Community: Connections and Collaborations
CFST 212 Disability in Society
CFST 301 Infant and Toddler Curriculum
CFST 311 Pre-school Curriculum: Language Development and Early Literacy
CFST 312 Pre-school Curriculum: Integrating Math, Science, Social Studies, and Art
CFST 390 Special Topics in Child and Family Studies
CFST 405 Administration and Leadership of Early Education and Care Settings
CFST 440 Research in Child and Family Studies
CFST 495 Internship in Child and Family Studies
EDUC 205 Equity in Educational Settings
EDUC 305 Educational Policy
PSYC 200 Psychology of Development or
PSYC 201 Child Development
SOCI 212 Sociology of the Families

## MINOR IN EDUCATION (EDU) (5 COURSES)

The Education Minor is designed for students who are exploring the discipline of education and related professions. Students can build skills and explore possible careers in teaching and learning, education policy and research, equity and social justice education, and related fields. Students pursuing this minor will complete five (5) courses as described below. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

The minor requires five (5) courses from the following:

## Required course (1):

EDUC 110 Education in American Society PreK-6 or
EDUC 200 Foundations of Secondary Education with Pre-Practicum I
Choose four (4) additional courses from the following (at least 2 of which must have the EDUC course prefix):
CFST 118 Child, Family, School, and Communities
CFST 212 Disability in Society
CFST 321 Theory and Practice of Play
CFST 333 Community-Based Education
CFST 390 Special Topics in Child and Family Studies
EDUC 205 Equity in Educational Settings
EDUC 215 Action Research in Education or
CFST 440 Research in Child and Family Studies
EDUC 230 Social-Emotional Learning
EDUC 246 Sheltered English Immersion in Secondary Education
EDUC 305 Educational Policy
EDUC 350 Education and Social Change or
SOCI 350 Education and Social Change
EDUC 490 Independent Study: Current Topics in Education
EDUC 495 Internship in Education
PSYC 200 Psychology of Development or
PSYC 201 Child Development or
PSYC 212 Adolescent Psychology or
PSYC 236 Psychology of Learning

## Initial Licensure Program in Secondary Education

Students who plan to teach in a specific content area must choose a major in a specific discipline, with a minor in Secondary Education. Programs in Secondary Education are offered in Visual Art, Biology, Chemistry, Earth and Space Science, English, History, Mathematics, and Spanish.

## SECONDARY EDUCATION MINOR

## Teacher of English Grades 5-12

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 321 Secondary Methods with Field Study II: English 5-12
EDPS 421A Secondary Professional Practicum A: English 5-12 (2 course-credits)
EDPS 421B Secondary Professional Practicum B: English 5-12 (2 course-credits)
PSYC 200 Psychology of Development

## Teacher of History Grade 5-12

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 322 Secondary Methods with Field Study II: History/Social Science 5-12
EDPS 422A Secondary Professional Practicum A: History/Social Science 5-12 PS
( 2 course-credits)
EDPS 422B Secondary Professional Practicum B: History/Social Science 5-12
( 2 course-credits)
PSYC 200 Psychology of Development

## Teacher of Mathematics Grades 5-8

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 323 Secondary Methods with Field Study II: Mathematics 5-8/8-12
EDPS 423A Secondary Professional Practicum A: Mathematics 5-8 (2 course-credits)
EDPS 423B Secondary Professional Practicum B: Mathematics 5-8 (2 course-credits)
PSYC 200 Psychology of Development

## Teacher of Mathematics Grades 8-12

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 323 Secondary Methods with Field Study II: Mathematics 5-8/8-12
EDPS 424A Secondary Professional Practicum A: Mathematics 8-12 (2 course-credits)
EDPS 424B Secondary Professional Practicum B: Mathematics 8-12 (2 course-credits)
PSYC 200 Psychology of Development

## Teacher of Science: Biology 8-12, Chemistry 8-12, Earth \& Space Science 8-12

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL 325 Secondary Methods with Field Study II: Science 8-12
EDPS 425A Secondary Professional Practicum A: Science 8-12 (2 course-credits)
EDPS 425B Secondary Professional Practicum B: Science 8-12 (2 course-credits)
PSYC 200 Psychology of Development

## Teacher of Visual Art Pre-K to Grade 8

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12
EDPS 428A Secondary Professional Practicum A: Visual Art Pre-K to Grade 8
( 2 course-credits)
EDPS 428B Secondary Professional Practicum B: Visual Art Pre-K to Grade 8
( 2 course-credits)
PSYC 200 Psychology of Development

## Teacher of Visual Art Grades 5-12

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL 328 Secondary Methods with Field Study II: Visual Art PreK-8 \& 5-12
EDPS 429A Secondary Professional Practicum A: Visual Art Grades 5-12
(2 course-credits)
EDPS 429B Secondary Professional Practicum B: Visual Art Grades 5-12
( 2 course-credits)
PSYC 200 Psychology of Development

## Professional Experiences in Education

The professional education program at Framingham State University consists of a planned series of developmental experiences, the amount of participation and responsibility increasing as the student progresses through the program. These experiences are designed to provide a transition from theoretical knowledge to professional application, culminating in assignment to student teaching. All students in secondary education will take two consecutive quarters of student teaching practicum and seminar that will include twelve weeks of student teaching for five days each week. All undergraduate majors in Early Childhood Education or Elementary Education are assigned to a full-time student teaching practicum.

The University assumes the responsibility for selecting supervising practitioners and schools and for assigning student teachers to those teachers and schools. While every effort is made to place student teachers in conveniently located centers, students must be prepared to assume responsibility for their own transportation.

Students are advised to check prerequisites in order to follow the correct sequence of professional experiences and courses that lead to student teaching. Students who do not follow the sequence may find themselves in difficulty because they have not taken a prerequisite course.

## Admission into Teacher Education and the Student Teaching Practicum

The Education Department is proud to continue Framingham State University's long-established tradition of excellence in teacher preparation. Students seeking licensure in Early Childhood Education, Elementary Education, or Secondary Education are encouraged to pursue one of our programs. Students who wish to become single content area teachers at the elementary level, such as in Spanish or mathematics, are encouraged to major in those subjects and consider pursuing educator licensure at the post-baccalaureate or graduate levels. The Department's commitment has been stated as follows:

- To encourage students in their continuing adult development toward becoming self-directing, professional persons.
- To foster an enthusiasm for scholarly investigation and intellectual pursuit which will be reflected by students in professional field settings.
- To assist students in broadening their communication skills in order to enhance both their personal and professional advancement.
- To raise students' social and cultural awareness through a professional program which reflects a philosophy of equal access to educational opportunity for all.
- To help students gain an understanding of human behavior, especially that of children and young people, that will aid them in working effectively with a variety of life styles and modes of learning.

These goals are consonant with the Standards established by the Commonwealth of Massachusetts as requisite for approval of programs to prepare candidates for licensure as teachers in this state and for reciprocal licensure through the Interstate Certification Compact. (See Education Department for the Handbook of Office of Professional Experiences for further information on teacher licensure standards.)

In accordance with the requirements for approval or accreditation established by the Commonwealth, the University's Professional Standards Committee (PSC) applies specific criteria for the retention of candidates in teacher preparation to determine that they possess academic competencies and personal characteristics appropriate to the requirements of teaching. The PSC uses a number of criteria, both objective and subjective, for permitting students to progress through the teacher education programs.

The requirements for entering pre-practicum experience and practicum are as follows:

1. An undergraduate student must be in good academic standing to be placed in a public school for a pre-practicum experience.
2. A student on disciplinary or academic probation will not be placed.
3. A student seeking early childhood or elementary licensure must be accepted to the licensure concentration within one of the two education majors. A student seeking secondary licensure must declare an education minor in their primary major discipline.
4. Effective Fall 2001, students must pass the "Communication and Literacy Skills" component of the Massachusetts Test for Educator Licensure (MTEL) prior to entering the methods course sequence (early childhood and elementary) or Secondary Methods (secondary).
5. Students must maintain a departmental GPA of 2.80 within their required licensure program courses, as well as earn a $\mathrm{C}+$ or higher in each individual course, as listed below. When a grade of C, C-, D+, D, D-, F, or U is received, the course(s) must be repeated in order to remain eligible for initial licensure. In addition, when a course with a required pre-practicum is repeated, the prepracticum component must also be repeated. If a student does not achieve a minimum grade of $\mathrm{C}+$ on the second attempt, the student will not be permitted to complete the licensure program. This policy applies to the following courses:

In the Early Childhood Education major:
EDUC 110 Education in American Society Grades PreK-6
EDUC 205 Equity in Educational Settings
EDUC 230 Social-Emotional Learning
EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ECED 311 Teaching Mathematics Grades PreK-2 with Pre-Practicum I
ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with Pre-Practicum II

EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with PrePracticum III

ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III
EDUC 450 Principles of Educational Curriculum and Assessment
In the Elementary Education major:
EDUC 110 Education in American Society Grades PreK-6
EDUC 205 Equity in Educational Settings
EDUC 230 Social-Emotional Learning
EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I
EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ELED 322 The Child and Literacy Grades 1-6 with Pre-Practicum II
ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III

ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III
EDUC 450 Principles of Educational Curriculum and Assessment
In the Secondary Education minor:
EDUC 200 Education in American Society with Field Study I
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL $321,322,323,325,327$, or 328 Secondary Methods with Field Study II
EDPS $421 \mathrm{~A} / \mathrm{B}, 422 \mathrm{~A} / \mathrm{B}, 423 \mathrm{~A} / \mathrm{B}, 424 \mathrm{~A} / \mathrm{B}, 425 \mathrm{~A} / \mathrm{B}, 427 \mathrm{~A} / \mathrm{B}, 428 \mathrm{~A} / \mathrm{B}$, or $429 \mathrm{~A} / \mathrm{B}$ Secondary Professional Practicum $A / B$

PSYC 200 Psychology of Development
6. Students majoring in Early Childhood Education, Elementary Education, or a Secondary Education Minor must maintain a minimum of 2.80 overall GPA at Framingham State University.
7. Prior to beginning the practicum (early childhood, elementary, or secondary), all students must demonstrate competency in their subject matter field for licensure by achieving a passing score on the appropriate subject area subtest of the MTEL or an equivalent test. Students majoring in Early Childhood Education or Elementary Education must also achieve a passing score on the Foundations of Reading test.
8. To be recommended by the University for Initial Licensure, a student must have achieved an overall GPA of at least 2.80 .
9. Teacher candidates are required to complete all paperwork and security checks required by the school districts including, but not limited to, Criminal Offender Record Information (CORI), Sex Offender Registry Information (SORI), and fingerprinting prior to beginning the prepracticum and practicum experiences. This process is completed through the designated school districts.

All students engaging in an experience requiring participation in the schools are required to be certified free from tuberculosis. This may be verified by proof of negative results of an intradermal tuberculin test. This information must be filed in the Educator Licensure and Placement Office, O'Connor Hall.

The general procedures are as follows:

1. Each student pursuing Initial Licensure, after satisfying general admission requirements of the University, be admitted to their respective program.

Students are required to make application for all professional field experiences in the Educator Licensure and Placement Office prior to February 15th for the fall semester and October 1st for the spring semester.
2. Students must submit applications for pre-practicum placements for the following courses:

## Early Childhood Education:

EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ECED 311 Teaching Mathematics Grades PreK-2 with Pre-Practicum I
ECED 332/332L The Young Child and Emergent Literacy Grades PreK-2 with Pre-Practicum II

EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ECED 353 Teaching English Language Arts and Social Studies Grades PreK-2 with PrePracticum III

ECED 363 Teaching Science Grades PreK-2 with Pre-Practicum III
ECED 440A Early Childhood Education Professional Practicum A (1 course-credit)
ECED 440B Early Childhood Education Professional Practicum B (2 course-credits)

## Elementary Education:

EDUC 301 Inclusive Practices for Students with Disabilities Grades PreK-6 with PrePracticum I

ELED 311 Teaching Mathematics Grades 1-6 with Pre-Practicum I
EDUC 342 Sheltered English Immersion Grades PreK-6 with Pre-Practicum II
ELED 322 The Child and Literacy Grades 1-6 with Pre-Practicum II
ELED 353 Teaching English Language Arts and Social Studies Grades 1-6 with Pre-Practicum III

ELED 363 Teaching Science Grades 1-6 with Pre-Practicum III
ELED 440A Elementary Education Professional Practicum A (1 course-credit)
ELED 440B Elementary Education Professional Practicum B (2 course-credits)
Secondary Education:
EDUC 200 Education in American Society with Field Study I
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL 321, 322, 323, 325, 327, or 328 Secondary Methods with Field Study II
EDPS $421 \mathrm{~A} / \mathrm{B}, 422 \mathrm{~A} / \mathrm{B}, 423 \mathrm{~A} / \mathrm{B}, 424 \mathrm{~A} / \mathrm{B}, 425 \mathrm{~A} / \mathrm{B}, 427 \mathrm{~A} / \mathrm{B}, 428 \mathrm{~A} / \mathrm{B}$, or 429A/B Secondary Professional Practicum A/B
3. Students make a final formal application for the student teaching practicum. This application will assist the Professional Standards Committee in evaluating the candidate's suitability to pursue a career in teaching. References may be required along with other pertinent information from University faculty and administration.

Applicants for the student teaching practicum who believe that they may not meet the criteria for retention in the program noted above are urged to consult with the Educator Licensure and Placement Office well before the due dates for filing an application.
4. The Professional Standards Committee shall assist the Educator Licensure and Placement Office in evaluating students and shall function as an appeal board for students when necessary

## TEACHER EDUCATION CENTERS

Framingham State University utilizes on-campus and off-campus teacher education centers to provide students with a variety of professional experiences. Student teaching and field study assignments for early childhood, elementary, middle and high school students are made in standard public school settings that utilize the Massachusetts Curriculum Frameworks.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

| Course | Domain |
| :--- | ---: |
| CFST 118 Child, Family, School, and Community: Connections |  |
| and Collaborations | III-B |
| RAMS 101ED First-Year Seminar: Diverse Perspectives in Education | III-C |
| RAMS 102ED First-Year Seminar: Education on Page and Screen | I-B |

## English

## Chair: Elizabeth (Lisa) Eck

Professors: Bartholomew Brinkman**, Elizabeth (Lisa) Eck*, Alexander (Sandy) Hartwiger, Patricia Lynne, Carolyn R. Maibor, Kelly A. Matthews, Desmond F. McCarthy, Lynn Parker, Evelyn Perry, Rachel V. Trousdale<br>Associate Professors: Jennifer DeLeon, Patricia A. Horvath, Samuel Witt<br>Assistant Professors: Kristen Bennett, Colleen Coyne**, Sally Shafto

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The English Department offers a wide-ranging program of poetry, prose, drama, film, linguistics, writing, and journalism for majors and non-majors alike. This program is designed to help students develop increased skills in reading, writing, and analytical thinking; greater appreciation of literature; and deeper understanding of the relationship between literature and race, gender, culture, history, and our shared humanity.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain I-B (Humanities) is satisfied through the completion of the English major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Placement Testing

Students are asked to take a placement test in writing if their adjusted high school GPA is less than 3.0 to determine which level of writing is most appropriate. The Director of the First-Year Writing program will contact students with a GPA of less than a 3.0 by e-mail (your Framingham State email account) with instructions on how to access the test online.

## Writing Code Interpretation

## Code Explanation

0.0-2.1 Student must enroll in and successfully complete ENWR 100 Composition I with Writing Studio before being eligible to enroll in ENWR 110 Composition II. Prior to the start of the semester, a writing placement test may be available.
2.3 Student must enroll in and successfully complete ENWR 105 Composition I before being eligible to enroll in ENWR 110 Composition II.
3.0 Student is eligible to enroll in ENWR 110 Composition II.
4.0 Student is eligible to enroll in ENWR 110 Composition II. Student has successfully completed non-credit preparatory coursework at another institution.
5.0 Student is eligible to enroll in ENWR 110 Composition II. Student has been awarded transfer credit equivalent to ENWR 105 Composition I.
9.0 Equivalent of ENWR 110 Composition II has been accepted in transfer.

## DESCRIPTION OF ENGLISH COURSE LEVELS

In addition to being grouped by distribution areas (i.e., British literature, American literature, world literature, and so forth), English Department courses are arranged in tiers that assume different levels of preparation, background, and experience.

100 -level courses are foundation courses in literature and composition. They assume little or no previous experience in the subject and include ENWR 110 Composition II, a college-wide requirement. 100-level courses are offered each semester. One 100-level literature, if taken during the freshman or sophomore year, may count towards the English major requirements.

200-level courses examine a broad range of material and various literary traditions, periods, and genres. These include historical overviews in British, American, and world literatures; genre studies; writing and journalism courses; women's studies; language studies; ethnic literature; and film studies. Literature courses at this level include a research component. ENGL 204 Literary Study, a required seminar for English majors culminating in a 10-page essay of approximately 3,000 words, should be taken in the first year or as early in the student's academic career as possible.

300-level courses are increasingly specialized courses that provide breadth of coverage with a more detailed and rigorous study of the material. Literature and film courses at this level presuppose some background and experience in literature or film, as well as proficiency in close reading, analytical thinking, and expository writing. Writing assignments in literature and film courses include essays that integrate research and close readings of texts, as well as a culminating 10-page essay of approximately 3,000 words.

400-level courses are advanced courses primarily intended for juniors and seniors. Most classes are conducted as a workshop or seminar in which students are responsible for oral reports and in-class presentations. Student papers in literature and film courses at this level are required to demonstrate mastery in research techniques, familiarity with various critical methodologies, and ability to synthesize disparate materials. ENGL 422 Seminar in Literature, which culminates in an 18-20 page essay of approximately $5,400-6,000$ words, is offered each semester and is intended to be taken in the senior year.

## ENGLISH MAJOR

## Departmental Requirements for English Major (U_EN)

## Major Core (9 courses):

ENGL 204 Literary Study
(Students permitted by the Department Chair to waive this requirement must take ENGL 333 Critical Writing.)

## Literature Group A (Early British): One (1) course from the following:

ENGL 220 Shakespeare
ENGL 251 British Literature I: Old English to 1680
ENGL 301 Chaucer in Context: More than Middle English
ENGL 314 English Renaissance Literature
ENGL 317 Studies in Shakespeare
ENGL 375 Studies in British Literature through 1680

## Literature Group B (Modern British): One (1) course from the following:

ENGL 232 Irish Literature
ENGL 255 British Literature II: 1680 to 1890
ENGL 318 British Romanticism
ENGL 322 The Nineteenth-Century British Novel
ENGL 330 Victorian Period
ENGL 337 Victorian Hauntings
ENGL 355 British Fiction since 1945
ENGL 386 Studies in British Literature after 1680
ENGL 389 Modern and Contemporary British and Irish Poetry

## Literature Group C (American): Two (2) courses in American literature:

ENGL 233 American Multi-Ethnic Young Adult Fiction
ENGL 243 American Short Story
ENGL 248 Literature of the Harlem Renaissance
ENGL 260 American Ethnic Literature
ENGL 261 American Writers I
ENGL 262 American Writers II
ENGL 263 African American Women Writers
ENGL 264 African American Literature
ENGL 275 Contemporary Latinx Literature
ENGL 347 Modern American Poetry
ENGL 365 American Romanticism
ENGL 366 Contemporary African American Poetry
ENGL 368 American Realism and Naturalism
ENGL 370 Studies in American Literature
ENGL 373 Modern American Fiction
ENGL 383 Contemporary American Fiction
ENGL 384 Contemporary American Poetry
ENGL 397 Studies in African American Literature

## Literature Group D: One (1) course from Classical and European:

ENGL 202 Comparative Mythology
ENGL 236 Western Literature: Origins to the Renaissance
ENGL 266 Western Literature: Renaissance to the Present
ENGL 271 Development of the Drama
ENGL 319 The Nineteenth-Century European Novel
ENGL 342 Modern Drama
ENGL 382 Contemporary European Literature

## Literature Group E: One (1) course from Contemporary Global and Postcolonial Literature:

ENGL 203 Contemporary Global Literature
ENGL 277 Gender in Contemporary Global Literature
ENGL 326 The Novel and the World
ENGL 346 Contemporary African Literature
ENGL 356 Literature of the Islamic World
ENGL 361 Postcolonial Literature
ENGL 376 The Twentieth-Century Novel
ENGL 398 Studies in Contemporary Global and Postcolonial Literature

## Literature Group F: One (1) course focused on literature or film from an historically underrepresented group*:

ENGL 228 Disability in Literature
ENGL 233 American Multi-Ethnic Young Adult Fiction
ENGL 240 LGBTQ Literature
ENGL 246 African American Film
ENGL 248 Literature of the Harlem Renaissance
ENGL 260 American Ethnic Literature
ENGL 263 African American Women Writers
ENGL 264 African American Literature

ENGL 275 Contemporary Latinx Literature
ENGL 366 Contemporary African American Poetry
ENGL 397 Studies in African American Literature
*Note: Students with a Concentration in Teaching and Minor in Secondary Education may fulfill this requirement and one of their Group C requirements with one course. However, they still must take 12 courses to complete the English major.

## Capstone:

ENGL 422 Seminar in Literature

NOTE: All English majors must take four (4) literature courses at the 300- or 400-level in addition to ENGL 422 Seminar in Literature. One of the four (4) courses may be a 300-level film course, as may ENGL 320 Young Adult Literature. Other children's literature courses do not satisfy this requirement. Students should focus on 300- and 400-level courses in the junior/senior years.

## World Language Requirement:

Minimum of elementary knowledge of one world language required (0-2 courses). The Elementary Level may be met in one of several ways:

- Completion of a college-level Elementary II or above language course;
- Emersion Language Placement test score of 3 or higher;
- Waiver from the Chair of the World Languages Department if high school academic language is other than English (usually applies to international students).


## COMPLETION OF ENGLISH MAJOR REQUIREMENTS

For the major in English, in addition to the nine (9) major core courses, students must complete either the following three (3) course requirements (UENG) or may alternatively choose a specific Concentration to complete.

## Required Writing or Journalism Elective:

## Choose one (1) of the following writing or journalism courses:

ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
ENGL 286 Professional Writing
ENGL 300 Writing for Children
ENGL 310 Composition Theory and Pedagogy
ENGL 311 Writing About Science
ENGL 331 News Writing
ENGL 333 Critical Writing
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 377 Writing for Online and Social Media
ENGL 387 Life Writing
ENGL 411 Creative Writing Seminar in Prose
ENGL 413 Creative Writing Seminar in Poetry

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100-level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATIONS

## CONCENTRATION IN AFRICAN AMERICAN LITERATURE (UENA)

Students must complete the nine (9) major core courses and the following six (6) required courses:

## Concentration Courses:

## Concentration core course:

ENGL 264 African American Literature

## Choose three (3) from the following courses:

ENGL 246 African American Film
ENGL 248 Literature of the Harlem Renaissance
ENGL 263 African American Women Writers
ENGL 366 Contemporary African American Poetry
ENGL 397 Studies in African American Literature

## Required Writing or Journalism Elective (1):

Choose one (1) of the following writing or journalism courses:
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
ENGL 286 Professional Writing
ENGL 300 Writing for Children
ENGL 310 Composition Theory and Pedagogy
ENGL 311 Writing About Science
ENGL 331 News Writing
ENGL 333 Critical Writing
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 377 Writing for Online and Social Media
ENGL 387 Life Writing
ENGL 411 Creative Writing Seminar in Prose
ENGL 413 Creative Writing Seminar in Poetry

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100 -level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

CONCENTRATION IN CHILDREN'S AND YOUNG ADULT LITERATURE (UENL)
Students must complete the nine (9) major core courses and the following six (6) required courses:
Concentration Courses:
Choose four (4) from the following courses:
ENGL 212 Children's Literature
ENGL 217 The History of Children's Literature
ENGL 300 Writing for Children
ENGL 320 Young Adult Literature
ENGL 399 Current Trends in Children's Literature

## Required Writing or Journalism Elective (1):

Choose one (1) of the following writing or journalism courses:
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
ENGL 286 Professional Writing
ENGL 300 Writing for Children
ENGL 310 Composition Theory and Pedagogy
ENGL 311 Writing About Science
ENGL 331 News Writing
ENGL 333 Critical Writing
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 377 Writing for Online and Social Media
ENGL 387 Life Writing
ENGL 411 Creative Writing Seminar in Prose
ENGL 413 Creative Writing Seminar in Poetry

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100-level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATION IN CREATIVE WRITING (UENC)

Students must complete the nine (9) major core courses and the following six (6) required courses:
Concentration Courses:
Choose One (1) from the following:
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
Choose Two (2) from the following:
ENGL 300 Writing for Children
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 387 Life Writing

Choose One (1) of the following:
ENGL 411 Creative Writing Seminar in Prose *
ENGL 413 Creative Writing Seminar in Poetry **

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100 -level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATION IN FILM STUDIES (UENF)

Students must complete the nine (9) major core courses and the following six (6) required courses:
Concentration Courses:
Choose four (4) from the following courses:
ENGL 206 Film and Literature
ENGL 207 The Language of Film
ENGL 208 Film Genres
ENGL 209 Film History: 1895 to 1960
ENGL 229 Film History: 1960 to Present
ENGL 234 Global Cinema
ENGL 246 African American Film
ENGL 325 Studies in Film
Required Writing or Journalism Elective:
Choose one (1) of the following writing or journalism courses:
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
ENGL 286 Professional Writing
ENGL 300 Writing for Children
ENGL 310 Composition Theory and Pedagogy
ENGL 311 Writing About Science
ENGL 331 News Writing
ENGL 333 Critical Writing
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 377 Writing for Online and Social Media
ENGL 387 Life Writing
ENGL 411 Creative Writing Seminar in Prose
ENGL 413 Creative Writing Seminar in Poetry

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100-level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATION IN JOURNALISM (UENJ)

Students must complete the nine (9) major core courses and the following six (6) required courses:

## Concentration Courses:

## Concentration core courses:

ENGL 225 Introduction to Journalism
ENGL 331 News Writing
Choose one (1) course from the following:
ENGL 335 Feature Writing
ENGL 377 Writing for Online and Social Media
ENGL 481 Editorial Workshop in Journalism or
ENGL 496 Internship in Journalism
Capstone (not taken above):
ENGL 481 Editorial Workshop in Journalism or
ENGL 496 Internship in Journalism

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100 -level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATION IN PROFESSIONAL WRITING (UENP)

Students must complete the nine (9) major core courses and the following six (6) required courses:
Concentration Courses:
Concentration core courses:
ENGL 286 Professional Writing
ENGL 495 Internship in English
Choose two (2) professional writing courses from the following, at least one (1) of which must be at the 300-level:
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 311 Writing About Science
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 372 Technical Writing
ENGL 377 Writing for Online and Social Media
Note: Students should plan to work with the Department Chair of English to identify an appropriate internship experience during the semester prior to enrolling in ENGL 495 Internship in English.

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100 -level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

CONCENTRATION IN WRITING (UENW)
Students must complete the nine (9) major core courses and the following six (6) required courses:

## Concentration Courses:

Choose four (4) from the following courses:
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
ENGL 286 Professional Writing
ENGL 300 Writing for Children
ENGL 310 Composition Theory and Pedagogy
ENGL 311 Writing About Science
ENGL 331 News Writing
ENGL 333 Critical Writing
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 349 Writing Poetry
ENGL 363 Writing Fiction
ENGL 372 Technical Writing
ENGL 377 Writing for Online and Social Media
ENGL 387 Life Writing
ENGL 411 Creative Writing Seminar in Prose
ENGL 413 Creative Writing Seminar in Poetry
ENGL 495 Internship in English

## Required English Electives:

Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100-level ENGL Literature course for this requirement if the course was taken prior to the student's junior year.

## CONCENTRATION IN TEACHING AND MINOR IN SECONDARY EDUCATION (UENT) <br> (INITIAL LICENSURE)

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of the Child and Family Studies major.

The Domain General Education courses listed below, with subjects related to the Massachusetts Curriculum Frameworks, are required for students in the Concentration in Teaching and Minor in Secondary Education.

## DOMAIN I-A:

COMM 107 Effective Speaking
DOMAIN III-A (Choose one (1)):
HSTY 111 United States History to Reconstruction
HSTY 112 United States History since Reconstruction
HSTY 165 Slavery, Race, and Rights in American History

HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age of Revolutions, 17501850

POSC 211 Political Theory: Justice, Law, and Order

## DOMAIN III-B:

PSYC 200 Psychology of Development

## DOMAIN III-C:

EDUC 222 Sheltered English Immersion in Secondary Education

## Specified Major Core courses (9 courses):

ENGL 204 Literary Study
ENGL 251 British Literature I: Old English to 1680 (Literature Group A)
ENGL 255 British Literature II: 1680 to 1890 (Literature Group B)
One course from Literature Group C
One course from Literature Group D
One course from Literature Group E
One course from Literature Group F
ENGL 422 Seminar in Literature

## Concentration core courses (4 courses):

ENGL 310 Composition Theory and Pedagogy
Choose two (2) additional English electives, one (1) of which must be at the 200level or above, from the department:

Students may use a 100 -level ENGL Literature course for this requirement only if the course was taken prior to the student's junior year.
Required course for Secondary Education Licensure:
COMM 107 Effective Speaking or
COMM 115 Human Communication

## Completion of second semester intermediate foreign language or equivalent

Secondary Education Minor Requirements for Teacher of English 5-12:
EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 321 Secondary Methods with Field Study II: English 5-12
EDPS 421A Secondary Professional Practicum A: English 5-12 (2 course-credits)
EDPS 421B Secondary Professional Practicum B: English 5-12 (2 course-credits)
PSYC 200 Psychology of Development
See Education Department section on the catalog for further information on teacher education.

## Bachelor of Arts with a major in English/Master of Arts with a concentration in English (BA/MA)

This program prepares students for communication-focused, writing-intensive careers in public relations, publishing, editing, and marketing. A combined B.A./M.A. in English prepares students for advanced graduate study in law or library science as well as English at the Ph.D. level. Students in the program will have the opportunity to develop and refine their writing and communication skills, think critically and creatively, and use emerging information technologies in the pursuit of advanced research. Students develop conference-style presentations and original scholarship suitable for future publication. The program affords students the opportunity for specialized, independent research and close collaboration with faculty working in their areas of specialization, culminating in a capstone thesis.
Eligible students apply to the $4+1$ program during their junior year and begin taking three (3) graduate-level courses during their senior year. These graduate-level courses count toward both a bachelor's and master's degree requirements, providing students with the opportunity to earn both degrees in five years.

## MINORS

## MINOR IN AFRICAN AMERICAN LITERATURE AND FILM (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
ENGL 264 African American Literature
Choose Three (3) of the following courses:
ENGL 246 African American Film
ENGL 248 Literature of the Harlem Renaissance
ENGL 263 African American Women Writers
ENGL 366 Contemporary African American Poetry
ENGL 397 Studies in African American Literature

## MINOR IN CHILDREN'S AND YOUNG ADULT LITERATURE (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
Choose four (4) of the following courses:
ENGL 212 Children's Literature
ENGL 217 The History of Children's Literature
ENGL 300 Writing for Children
ENGL 320 Young Adult Literature
ENGL 399 Current Trends in Children's Literature

## MINOR IN CREATIVE WRITING (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
Choose one (1) of the following creative writing courses:
ENGL 282 Creative Writing
ENGL 284 Writing Fiction and Creative Nonfiction
Choose two (2) of the following creative writing courses:
ENGL 300 Writing for Children
ENGL 349 Writing Poetry *
ENGL 363 Writing Fiction **
ENGL 387 Life Writing **

# Choose one (1) of the following capstone courses: <br> ENGL 411 Creative Writing Seminar in Prose * <br> ENGL 413 Creative Writing Seminar in Poetry ** <br> * ENGL 363 Writing Fiction or ENGL 387 Life Writing serve as prerequisites to ENGL 411 Creative Writing Seminar in Prose. <br> ** ENGL 349 Writing Poetry is a prerequisite to ENGL 413 Creative Writing Seminar in Poetry. 

## MINOR IN ENGLISH (6 COURSES)

Choose five (5) English courses; at least four (4) of which must be at the 200-level or above (ENWR 110 Composition II is a prerequisite for all English courses at or above the 200-level).
Note: Students may count RAMS 10xEN toward the minor.
Students may not count the following three courses for the minor:
ENWR 100 Composition I with Writing Studio
ENWR 105 Composition I
ENWR 110 Composition II

## MINOR IN FILM STUDIES (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
Choose four (4) courses from the following:
ENGL 206 Film and Literature
ENGL 207 The Language of Film
ENGL 208 Film Genres
ENGL 209 Film History: 1895 to 1960
ENGL 229 Film History: 1960 to Present
ENGL 234 Global Cinema
ENGL 246 African American Film
ENGL 325 Studies in Film

## MINOR IN JOURNALISM (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
ENGL 225 Introduction to Journalism
ENGL 331 News Writing
One (1) of the following:
ENGL 335 Feature Writing
ENGL 377 Writing for Online and Social Media
ENGL 481 Editorial Workshop in Journalism or ENGL 496 Internship in Journalism
Capstone (not taken above):
ENGL 481 Editorial Workshop in Journalism or ENGL 496 Internship in Journalism

## MINOR IN PROFESSIONAL WRITING (5 COURSES)

ENWR 110 Composition II
ENGL 286 Professional Writing
ENGL 495 Internship in English

## Choose two (2) professional writing courses from the following, at least one (1) of which must be at the 300 -level:

ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 311 Writing About Science
ENGL 335 Feature Writing
ENGL 338 Grant Writing
ENGL 372 Technical Writing
ENGL 377 Writing for Online and Social Media
Note: Note: Students should plan to work with the Department Chair of English to identify an appropriate internship experience during the semester prior to enrolling in ENGL 495 Internship in English.

## MINOR IN WRITING (5 COURSES)

ENWR 110 Composition II (Gen. Ed. Domain Common Core Writing)
Choose four (4) additional advanced English writing courses.

## INTERPARTMENTAL MINORS

Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN AMERICAN STUDIES (5 COURSES)

To earn an American Studies minor, students must apply in writing to the Chair of either the English or History Department and have a sequence of courses designed and approved to meet specific goals. Applications are available in either Chair's office. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No American Studies minor will be awarded without compliance with the above format.

## MINOR IN DIGITAL HUMANITIES (5 COURSES)

The minor in Digital Humanities responds to developments across the humanities and in the labor market. Aimed primarily at students in the Humanities, the interdisciplinary minor complements traditional humanities coursework by stressing technological competencies and the analysis of humanities data. Skills learned in the minor are designed to make them more competitive in the labor market upon graduation-a practical consideration reinforced by a required internship.

## MINOR IN IRISH STUDIES (IRS) (5 COURSES)

To earn an Irish Studies minor, students must apply in writing to the Chair of the English Department. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements.

## MINOR IN SCIENCE COMMUNICATION (SCM) (5 COURSES)

The University offers a minor in Science Communication. To declare a Science Communication minor, students must complete the appropriate form and obtain the signature of one of the following department chairs: Communication Arts, English, or Physics and Earth Sciences. Students should meet with an advisor in the minor to design a plan for completing the minor. The specific courses taken depend in part on the student's major. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No Science Communication minor will be awarded without compliance with the above format.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.):

| Courses | Domain(s) |
| :---: | :---: |
| DGHM 110 Introduction to Digital Humanities | II-A |
| ENWR 110 Composition II Common Core | Writing |
| ENGL 111 Reading Literature | I-B |
| ENGL 118 Monsters | I-B |
| ENGL 124 Literature and Social Justice | III-C |
| ENGL 132 Alternate Pasts | I-B |
| ENGL 150 Rebels and Revolution | I-B |
| ENGL 186 Banned Books | I-B |
| ENGL 201 Mythology and Folklore | I-B |
| ENGL 203 Contemporary Global Literature | III-B |
| ENGL 207 The Language of Film | I-B |
| ENGL 209 Film History: 1895 to 1960 | III-A |
| ENGL 220 Shakespeare | I-B |
| ENGL 228 Disability in Literature | I-B |
| ENGL 231 Contemporary African American Cinema | III-C |
| ENGL 232 Irish Literature | I-B |
| ENGL 233 American Multi-Ethnic Young Adult Fiction | I-B |
| ENGL 236 Desire and Power in Early Western Literature | III-A |
| ENGL 238 Environmental Literature | I-B |
| ENGL 240 LGBTQ Literature | III-B |
| ENGL 242 The Graphic Novel | I-B |
| ENGL 243 The American Short Story | I-B |
| ENGL 248 Literature of the Harlem Renaissance | III-C |
| ENGL 260 American Ethnic Literature | III-C |
| ENGL 261 American Writers I | I-B |
| ENGL 262 American Writers II | I-B |
| ENGL 263 African American Women Writers | III-C |
| ENGL 264 African American Literature | III-C |
| ENGL 275 Contemporary Latinx Literature | I-B |
| ENGL 282 Creative Writing | I-A |
| ENGL 284 Writing Fiction and Creative Nonfiction | I-A |
| RAMS 101DH First-Year Seminar: Explorations in Digital Humanities | II-B |
| RAMS101EN First-Year Seminar: Explorations in Literature | I-B |
| RAMS102EN First-Year Seminar: Literature and the | III-B |
| Contemporary World RAMS 103EN First-Year Seminar: Creative Thinking through Creative | I-A |

# Environment, Society, and Sustainability 

Chair: Lawrence McKenna

Professors: Lawrence W. McKenna, David Merwin**, Judith Otto, Vandana Singh<br>Associate Professors: George Bentley<br>Assistant Professor: Santosha L. Adhibhatta, Kristin A. Chon

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## Majors

The Department of Environment, Society, and Sustainability offers a Bachelor of Arts (B.A.) with majors Environmental Studies \& Social Justice, and Geospatial \& Data Analysis as well as Bachelor of Science (B.S.), with major in and Environmental Sciences. Also offered is a $2+3$ bachelor's program in Pre-Engineering in conjunction with the University of Massachusetts at both Dartmouth and Lowell campuses, as well as with the Massachusetts Maritime Academy.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of the Environmental Studies \& Sustainability major or the Geospatial \& Data Analysis major. The General Education Domain II-B (Natural Sciences) requirement is satisfied through the completion of the Environmental Sciences major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## University Planetarium

Managed through the Christa McAuliffe center, the facility serves university students, public school groups, and the local community with a diverse range of programming.

## ENVIRONMENTAL STUDIES AND SOCIAL JUSTICE MAJOR (U_EJ)

## Required Department Core Courses (5):

EASC 201 Principles of Earth System Science
ENVS 101 Introduction to Environmental Science and Policy
ENVS 272 Global Environmental Issues
GEOG 216 Introduction to Geographical Information Systems
Capstone:
EVSS 460 Thesis in Environment, Society, and Sustainability

## Required Major courses (12):

## Core Courses (8 Courses):

ENVS 246 Sustainability and Social Justice
GEOG 110 World Regional Geography
GEOG 235 Environmental Law and Policy
GEOG 240 Land Use Law and Policy
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 375 Sustainable Management of Natural Resources or
GEOG 380 Making Places Sustainable
GEOL 208/208L Principles of Physical Geology with Lab
STAT 117 Introduction to Statistics or
STAT 208 Statistics for the Natural Sciences or
ENVS 202 Data Analysis for Scientists

## GENERAL STUDIES CONCENTRATION (UEJG)

## Required Concentration Core (4 courses):

Choose two (2) courses from the following Policy options, only one (1) of which may be at the 100-level:

EASC 308 Climatology and the Future of Human Society
ENVS 218 Energy Science and Policy: The Pursuit of Sustainability
EVSS 490 Independent Study in Environment, Society, and Sustainability
EVSS 495 Internship in Environment, Society, and Sustainability
GEOG 180 Native Americans: The Original Injustice on American Soil
GEOG 201 Money, Power, and Space: Introduction to Economic Geography
GEOG 208 The Environment, Health, and Disease
GEOG 225 Population Food and Development
GEOG 390 Special Topics in Regional Geography
PHIL 234 Environmental Ethics
POSC 229 Public Policy Analysis
POSC 325 Public Management
Choose two (2) courses from the following Geospatial options:
ENVS 333 Digital Field Methods: Drones, Data, \& Artificial Intelligence
GEOG 111 Visualizing Social and Environmental Justice
GEOG 214 Spatial Analysis Using Geographic Information Systems
GEOG 300 Geospatial Applications Using Python
GEOG 316 Advanced Geographic Information Systems
GEOG 328 Introduction to Remote Sensing

## ENVIRONMENTAL SCIENCES MAJOR (U_ET)

This major combines a strong foundation in science, emphasizing biology, with broad training in geographical theory and techniques. This program prepares students to solve complex multidisciplinary problems and to communicate effectively with the scientific community and the general public. Students graduating with this major will be prepared to successfully obtain positions with consulting firms, governmental agencies, private corporations, and non-profit organizations. They will be prepared for work as environmental analysts, town wetlands administrators, environmental educators, or environmental scientists. They will also be prepared to pursue graduate studies in Environmental Science, Conservation Biology, Resource Management, Environmental Planning, Environmental Engineering, Environmental Law, and Environmental Education. Graduates who choose not to pursue careers in Environmental Science will be well prepared for any career that requires a strong science background emphasizing data analysis, critical thinking, integration of complex information, spatial interpretation skills, effective communication and problem resolution skills.

## Required Major Core courses (5):

EASC 201 Principles of Earth System Science
ENVS 101 Introduction to Environmental Science and Policy
ENVS 272 Global Environmental Issues
GEOG 216 Introduction to Geographical Information Systems
Capstone:
EVSS 460 Thesis in Environment, Society, and Sustainability

## CONCENTRATIONS

## ENVIRONMENTAL SCIENCE AND POLICY (UETE)

## Required Concentration Core courses (11):

BIOL 130/130L Principles of Biology with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
CHEM 103/103L Introductory Chemistry with Lab or
CHEM 107/107L Principles of Chemistry with Lab
ECON 102 Principles of Microeconomics
ECON 333 Environmental Economics
ENVS 202 Data Analysis for Scientists
GEOG 235 Environmental Law and Policy
GEOG 375 Sustainable Management of Natural Resources
GEOL 208/208L Principles of Physical Geology with Lab
MATH 123 Introduction to Functions

## Required Restricted Electives (Six (6) courses):

Communication -
Choose one (1) course:
COMM 107 Effective Speaking
COMM 115 Human Communication
COMM 328 Argumentation and Advocacy
ENGL 225 Introduction to Journalism

ENGL 311 Writing about Science
ENGL 372 Technical Writing

## Geospatial -

## Choose one (1) course:

GEOG 214 Spatial Analysis Using Geographic Information Systems
GEOG 300 Geospatial Applications Using Python
GEOG 316 Advanced Geographic Information Systems
GEOG 328 Introduction to Remote Sensing

## Policy and Planning -

## Choose two (2) courses:

ENVS 218 Energy Science and Policy: The Pursuit of Sustainability
ENVS 246 Sustainability and Social Justice
GEOG 225 Population, Food, and Global Development
GEOG 240 Land Use Law and Policy
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 375 Sustainable Management of Natural Resources
GEOG 380 Making Places Sustainable
PHIL 234 Environmental Ethics
POSC 250 American Legal Systems
POSC 329 Public Policy Analysis

## Science -

Choose two (2) courses:
BIOL 212/212L Wildlife Specimen Preparation Techniques with Lab
BIOL 224/224L Animal Physiological Ecology with Lab
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 236/236L Ornithology with Lab
BIOL 255/255L Plant Physiology with Lab
BIOL 291 Principles of Tropical Ecology and Conservation: Field Study
BIOL 321/321L Limnology with Lab
BIOL 323 Biology and Conservation of Crocodiles
BIOL 335/335L Wildlife Biology with Lab
EASC 208 Principles of Meteorology
EASC 228 Principles of Oceanography
EASC 296 On Thin Ice: Climate Change and the Cryosphere
ENVS 300/300L Environmental Science Field Methods with Lab
ENVS 333 Digital Field Methods: Drones, Data, and Artificial Intelligence
GEOL 233 Environmental Geology
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab

## EARTH AND PLANETARY SYSTEMS (UETP)

## Required Concentration Core courses (11):

ASTR 218 Principles of Solar System Astronomy OR
ASTR 230 Stars and Galaxies
BIOL 130/130L Principles of Biology with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
EASC 208 Principles of Meteorology
EASC 228 Principles of Oceanography
ENVS 300/300L Environmental Fields Methods with Lab
GEOL 208/208L Principles of Physical Geology with Lab
GEOL 233 Environmental Geology
MATH 180 Precalculus
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab

## Choose Two (2) Required Restricted Electives:

ASTR 218 Principles of Solar System Astronomy or
ASTR 230 Stars and Galaxies (whichever one was not taken in the concentration core)
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 321/321L Limnology with Lab
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab or
CHEM 207/207L Organic Chemistry I with Lab
EASC 296 On Thin Ice: Climate Change and the Cryosphere
EASC 308 Climatology and the Future of Human Society
ENGL 311 Writing About Science
EVSS 490 Independent Study in Environment, Society, and Sustainability
EVSS 495 Internship in Environment, Society, and Sustainability
ENVS 202 Data Analysis for Scientists

## EARTH AND PLANETARY SYSTEMS WITH SECONDARY EDUCATION MINOR (UETT)

Students who plan to teach at the high school level will fulfill the Commonwealth's requirements for secondary education certification in earth and space science by completing a program similar to the earth and planetary systems concentration. Students must also declare and complete the requirements for a Secondary Education Minor (see Education Department section of the catalog).

## Required Concentration Core courses (12):

ASTR 218 Principles of Solar System Astronomy or
ASTR 230 Stars and Galaxies

BIOL130/130L Principles of Biology with Lab
CHEM 103/103L Introductory Chemistry with Lab
EASC 208 Principles of Meteorology
EASC 228 Principles of Oceanography
EASC 296 On Thin Ice: Climate Change and the Cryosphere
ENVS 300/300L Environmental Fields Methods with Lab
GEOL 208/208L Principles of Physical Geology with Lab
GEOL 233 Environmental Geology
MATH 180 Precalculus
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab PSYC 200 Psychology of Development

## Choose Two (2) Required Restricted Electives:

ASTR 218 Principles of Solar System Astronomy OR
ASTR 230 Stars and Galaxies (whichever one was not taken in the concentration core)
BIOL 232/232L Invertebrate Zoology with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 321/321L Limnology with Lab
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab EASC 308 Climatology and the Future of Human Society

ENGL 311 Writing About Science
ENVS 202 Data Analysis for Scientists
EVSS 490 Independent Study in Environment, Society, and Sustainability
EVSS 495 Internship in Environment, Society, and Sustainability
GEOL 233 Environmental Geology

## Required Minor in Teacher of Science: Earth\& Space Science 8-12 courses:

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology

EDIL 325 Secondary Methods with Field Study II: Science Grades 8-12
EDPS 425A Secondary Professional Practicum A: Science Grades 8-12 (2 course-credits)
EDPS 425B Secondary Professional Practicum B: Science Grades 8-12 (2 course-credits)

## GEOSPATIAL AND DATA ANALYSIS MAJOR (U_GD)

## Required Major Core courses (5):

EASC 201 Principles of Earth System Science
ENVS 101 Introduction to Environmental Science and Policy
ENVS 272 Global Environmental Issues
GEOG 216 Introduction to Geographical Information Systems
Capstone:
EVSS 460 Thesis in Environment, Society, and Sustainability
Major Required Core Courses ( 6 courses):
GEOG 110 World Regional Geography
GEOG 111 Visualizing Social and Environmental Justice
GEOG 214 Spatial Analysis Using Geographic Information Systems
GEOG 316 Advanced Geographic Information Systems
GEOG 328 Introduction to Remote Sensing
STAT 117 Introduction to Statistics

## Concentration in General Studies (UGDG)

## Required Concentrations Courses ( 4 courses):

Choose four (4) courses from the following courses:
CSCI 156 Python Programming for Applications
ENVS 202 Data Analysis for Scientists
ENVS 333 Digital Field Methods: Drones, Data, \& Artificial Intelligence
EVSS 490 Independent Study in Environment, Society, and Sustainability
EVSS 495 Internship in Environment, Society, and Sustainability
GEOG 208 The Environment, Health, and Disease
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 300 Geospatial Applications Using Python

## PRE-ENGINEERING PROGRAM (UPEN)

This program establishes a curriculum leading to transfer admission by Articulation Agreement $(2+3,3+3)$ to a Bachelor of Science degree program in one of the engineering disciplines at the:

University of Massachusetts-Lowell in Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Plastics Engineering, and Engineering Technology;

University of Massachusetts-Dartmouth: Bio-Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering;

Mass Maritime Academy: Energy Engineering, Facilities Engineering.
Each student who enters the program will be assigned an advisor from the Department of Physics and Earth Sciences. By the end of their freshman year, students should be considering what specific area of engineering they wish to transfer into at the above-mentioned institutions. It may be necessary for transfer students to schedule summer session coursework if they wish to complete all degree requirements over a four-year period.

The program of study at Framingham State University is shown below as two options of either two years of study or three years of study before transferring. Each incoming student must pass the mathematics placement examination in order to register for a credit-bearing mathematics course Students must do well on this examination to begin the mathematics sequence with Calculus I. Students who do not place into the Calculus I course are required to take additional mathematics prior to taking Calculus I. Courses to be taken during the sophomore year of the program depend, to some extent, on the choice of engineering concentration.

## Option A: 2+ Program Required Courses (16)

Required Core courses, common to all 2-3 engineering options (13 courses):
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CSCI 130 Computer Science I Using Java
ECON 102 Principles of Microeconomics
EGNR 101 Introduction to Engineering
ENGL 311 Writing for Science or
ENGL 372 Technical writing
ENVS 202 Data analysis for Scientists
ENWR 110 Composition II
MATH 219 Calculus I
MATH 220 Calculus II
MATH 221 Calculus III
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab
Restricted Electives: Choose three (3) from the following lists:
Science restricted electives: Choose two (2) from the following list (depending on branch of engineering interest)

BIOL130/130L Principles of Biology with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 241 Introduction to Heat and Mass Transfer
CSCI 156 Python programming for applications
EGNR 211 Engineering Statics
EGNR 212 Engineering Dynamics
GEOL 208/208L Principles of Physical Geology with Lab
MATH 222 Differential Equations
Social science perspectives, restricted electives: Choose one (1) from the following list (depending on branch of engineering interest)

ECON 101 Principles of Macroeconomics
ENVS 246 Sustainability and Social Justice
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 380 Making Places Sustainable
PHIL 102 Introduction to Ethics
SOCI 282 Society, Technology, and Future

## Option B: 3+ Program Required Courses (24)

Required Core courses, common to all 3+3 engineering options (24 courses):
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CSCI 130 Computer Science I using Java
CSCI 215 Computer Science II Using Java
EASC 201 Earth System Science
ECON 102 Principles of Microeconomics
EGNR 101 Introduction to Engineering
ENGL 311 Writing for Science or
ENGL 372: Technical Writing
ENVS 202 Data Analysis for Scientists
ENWR 110 Composition II
GEOL 208/208L Physical Geology with Lab
MATH 123 Introduction to Functions
MATH 180 Precalculus
MATH 219 Calculus I
MATH 220 Calculus II
MATH 221 Calculus III
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab
Restricted Electives: Choose six (6) from the following lists:
Science restricted electives: Choose four (4) from the following list (depending on branch of engineering interest)

BIOL130/130L Principles of Biology with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 241 Introduction to Heat and Mass Transfer
CSCI 333 Object oriented programming using C++
EGNR 211 Engineering Statics
EGNR 212 Engineering Dynamics
MATH 222 Differential Equations
Social science perspectives, restricted electives: Choose two (2) from the following list (depending on branch of engineering interest)

ECON 101 Principles of Macroeconomics
ENVS 246 Sustainability and Social Justice
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 380 Making Places Sustainable
PHIL 102 Introduction to Ethics
SOCI 282 Society, Technology, and Future

## MINORS

## MINOR IN EARTH AND PLANETARY SYSTEMS (EPS) (5 COURSES)

## Two (2) required courses:

EASC 101 Climate Change is Now: An Introduction to Earth Systems or EASC 201 Principles of Earth System Science

GEOL 208/208L Principles of Physical Geology with Lab

## Choose three (3) of the following:

ASTR 218 Principles of Solar System Astronomy or

$$
\text { ASTR } 230 \text { Stars and Galaxies }
$$

EASC 208 Principles of Meteorology
EASC 228 Principles of Oceanography
EASC 296 On Thin Ice: Climate Change and the Cryosphere
ENVS 300/300L Environmental Science Field Methods w/ Lab
GEOL 233 Environmental Geology

## MINOR IN ENVIRONMENTAL ENGINEERING (EEG) (6 COURSES)

The minor in Environmental Engineering broadens the professional capabilities of students while expanding their area of expertise on topics like the impact of human activity on the environment and ways to control and prevent environmental problems. Students are required to complete two engineering courses, two science courses with labs and any two electives from the list below. Students must complete all prerequisites required for any course.

## Two (2) required courses:

EGNR 101 Introduction to Engineering
EGNR 272 Environmental Pollution

## Choose two (2) of the following:

ENVS 202 Data Analysis for Scientists
ENVS 246 Sustainability and Social Justice
ENVS 272 Global Environmental Issues
GEOG 375 Sustainable Management of Natural Resources
PHIL 234 Environmental Ethics

## Choose two (2) of the following:

BIOL 248/248L Principles of Ecology with Lab
BIOL 228/228L Microbiology with Lab
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab
ENVS 300/300L Environmental Science Field Methods with Lab
GEOL 208/208L Physical Geology with Lab

## MINOR IN ENVIRONMENTAL SCIENCE (EVS) (5 COURSES)

The minor in Environmental Science provides undergraduate students with a structured program highlighting the interdisciplinary study of the environment with an emphasis on scientific methods. Students are required to complete one course in introductory concepts, one data analysis/methods course, one laboratory course, one policy-related course, and one science-related course.

## Choose one (1) of the following:

EASC 201 Principles of Earth System Science
ENVS 101 Introduction to Environmental Science and Policy

## Choose one (1) of the following:

ENVS 202 Data Analysis for Scientists
ENVS 333 Digital Field Methods: Drones, Data and AI
GEOG 111 Visualizing Social and Environmental Justice
GEOG 216 Introduction to Geographic Information Systems
GEOG 300 Geospatial Applications Using Python

## Choose one (1) of the following:

BIOL 203 Plants and Society
BIOL 248/248L Principles of Ecology with Lab
BIOL 251/251L Vascular Plant Taxonomy with Lab
BIOL 321/321L Limnology with Lab
ENVS 300/300L Environmental Field Methods with Lab
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab or GEOL208/208L Principles of Physical Geology

## Choose one (1) of the following:

ASTR 128 Solar System Astronomy
ASTR 230 Stars and Galaxies
EASC 108 Understanding the Weather: Introduction to Meteorology or
EASC 208 Principles of Meteorology
EASC 118 Our Blue Planet: An Introduction to Oceanography or EASC 228 Principles of Oceanography

EASC 296 On Thin Ice: Climate Change and the Cryosphere
EASC 308 Climatology and the Future of Human Society
GEOL 233 Environmental Geology

## Choose one (1) of the following:

ECON 333 Environmental Economics
ENGL 311 Writing about Science
ENVS 218 Energy Science and Policy: The Pursuit of Sustainability
ENVS 246 Sustainability and Social Justice
ENVS 272 Global Environmental Issues
GEOG 235 Environmental Law and Policy
GEOG 375 Sustainable Management of Natural Resources

## MINOR IN ENVIRONMENTAL STUDIES AND SOCIAL JUSTICE (ESJ)

(5 COURSES)
The minor in Environmental Studies and Social Justice is designed to provide undergraduate students with a structured program highlighting the interdisciplinary study of the environment with an emphasis on environmental justice. To fulfill the minor requirements, students must complete three required courses and two elective courses.

## Three (3) required courses:

ENVS 101 Introduction to Environmental Science and Policy
ENVS 246 Sustainability and Social Justice
ENVS 272 Global Environmental Issues

## Choose two (2) of the following:

EASC 208 Climatology and the Future of Human Society
ENGL 311 Writing about Science
GEOG 180 Native Americans: The Original Injustice on American Soil
GEOG 235 Environmental Law and Policy
GEOG 240 Land Use Law and Policy
GEOG 260 Introduction to Urban Studies and Planning in the United States
GEOG 375 Sustainable Management of Natural Resources
GEOG 380 Making Places Sustainable
NUTR 208 Food System Sustainability

## MINOR IN GEOGRAPHIC INFORMATION SYSTEMS (GIS) <br> (5 COURSES)

The minor requires five (5) courses as follows:
GEOG 214 Spatial Analysis Using Geographic Information Systems
GEOG 216 Introduction to Geographical Information Systems
GEOG 316 Advanced Geographic Information Systems

## Choose two (2) additional courses from the following:

CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 120 Introduction to Information Technology
CSCI 138 Information Technology and the Environment
CSCI 140 Introduction to the Internet, Graphics, and Multimedia
ENVS 202 Data Analysis for Scientists
GEOG 208 The Environment, Health, and Disease
GEOG 328 Introduction to Remote Sensing
GEOG 490 Independent Study in Geography
GEOG 495 Internship in Geography
STAT 117 Introduction to Statistics or STAT 208 Biostatistics

## MINOR IN GEOGRAPHY (GEO) (5 COURSES)

The minor requires five (5) courses as follows:
GEOG 101 Introduction to Human Geography
GEOG 212 Geographic Perspectives on the Global Environment
One (1) regional geography course.
Two (2) additional geography courses other than regional geography.

## MINOR IN PHYSICS (PHY) (5 COURSES)

The following courses are required to complete this minor:
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab
PHYS 272 Modern Physics
CHEM 303/303L Physical Chemistry I with Lab
PHIL 118 Introduction to Philosophy of Science

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

| Courses D | Domain(s) |
| :---: | :---: |
| ASTR 128 Solar System Astronomy | II-B |
| ASTR 130 Search for Life in the Universe | II-B |
| ASTR 230 Stars and Galaxies | II-B |
| EASC 101 Climate Change is Now: An Introduction to Earth Systems | II-B |
| EASC 108 Understanding the Weather: Introduction to Meteorology | II-B |
| EASC 118 Our Blue Planet: An Introduction to Oceanography | II-B |
| GEOG 101 Introduction to Human Geography | III-B |
| GEOG 110 World Regional Geography | III-C |
| GEOG 111 Visualizing Social and Environmental Justice | II-A |
| GEOG 180 Native Americans: The Original Injustice on American Soil | III-B |
| GEOG 206 Political Geography | III-C |
| GEOG 211 Cultural Geography | III-B |
| GEOG 222 Geographic Perspectives on Globalization | III-C |
| GEOG 237 Geographies of Global Climate Change | III-B |
| GEOG 250 Geography of the United States and Canada | III-C |
| GEOG 252 Geography of Europe | III-C |
| GEOG 254 Geography of Monsoon Asia | III-C |
| GEOG 255 Geography of Sub-Saharan Africa | III-C |
| GEOG 256 Geography of the Middle East | III-C |
| GEOG 258 Geography of the British Isles | III-C |
| GEOG 291 Western Regional Geography: Field Study | III-C |
| GEOL 108 Our Dynamic Planet: Introduction to Physical Geology with Lab | b II-B, Lab |
| PHSC 109 Introduction to Physical Science | II-B, Lab |
| PHYS 111 Physics, Nature, and Society | II-B, Lab |
| PHYS 201 Physics with Applications to Earth and Life Systems | II-B, Lab |
| PHYS 211 Principle of Physics I | II-B, Lab |
| RAMS 101ES First-Year Seminar: Earth Science Perspectives | II-B |
| RAMS 101GY First-Year Seminar: Geographical Perspectives | III-B |

# Fashion Design and Retailing 

## Chair: Hae Won Ju

Professors: Virginia Noon
Associate Professors: Seunghye Cho, Hae Won Ju**, Pamela Sebor-Cable, Ruirui Zhang
Assistant Professors: Laura Kane*
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) is satisfied through the completion of the either the major in Fashion Design or the major in Fashion Merchandising.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Mission

The mission of the Fashion Design and Retailing department is to prepare students as ethical and responsible leaders in the fashion design and retailing industry.

## Vision

To empower graduates to excel in a variety of careers such as design, product development, buying, retail management, and fashion promotion.

## Learning Goals

The Fashion Design and Retailing Department has two majors: Fashion Design and Fashion Merchandising. The first four learning goals apply to both concentrations; additional learning goals relate to each specific concentration.
Students enrolled in the Fashion Design major will:

- Apply the principles of design, motives of dress, business cycles, and the soft goods chain to the overall fashion industry.
- Investigate and evaluate the interrelationship of textile products, apparel production methods, and product life cycle.
- Research the major factors that affect the design, purchase, and trade of apparel and textiles to create a well written research project.
- Analyze the apparel design and retailing industry in the world marketplace.
- Identify, describe, demonstrate and evaluate apparel construction and production methods.
- Create and develop original apparel designs from initial concept to finished garment utilizing flat pattern, draping, tailoring, and couture techniques.
- Draw fashion illustrations and flat sketches, by hand and on computerized systems to create an illustrated collection of designs and garment specification/product development materials.
- Develop and present orally and visually a professional quality portfolio of original design ideas and concept boards to demonstrate product knowledge and terminology used in the apparel industry.

Students enrolled in the Fashion Merchandising major will:

- Apply the principles of design, motives of dress, business cycles, and the soft goods chain to the overall fashion industry.
- Investigate and evaluate the interrelationship of textile products, apparel production methods, and product life cycle.
- Research the major factors that affect the design, purchase, and trade of apparel and textiles to create a well written research project.
- Analyze the apparel design and retailing industry in the world marketplace.
- Identify and apply the principles of retailing to create a complete business plan including an assortment of merchandise to meet the needs of a specific target market.
- Investigate the major strategies of the retailing industry in regards to location, sales, merchandise management, and promotion.
- Integrate current technologies as they relate to business practices in fashion industries
- Present information in an organized and effective manner incorporating written, oral, and visual components.


## MAJOR IN FASHION DESIGN (U_FA)

## Major Core Requirements ( 13 courses):

FSHN 110 Fashion: Designer to Consumer
FSHN 120 Consumer Textiles
FSHN 223 History of Costume or
FSHN 226 History of Textiles
FSHN 245 Research Methods for the Fashion Industry
FSHD 140 Principles of Apparel Construction
FSHD 205 Essential Methods for Fashion Design
FSHD 230 Advanced Apparel Construction
FSHD 330 Digital Tools for the Fashion Industry
FSHD 342 Flat Pattern Design
FSHD 352 Draping
FSHD 372 Computerized Pattern Design: Gerber
STAT 107 Business Statistics or
STAT 117 Introduction to Statistics

## Required Capstone Course:

FSHD 487 Apparel Design Portfolio

## Apparel Design Concentration (UFAA)

## Concentration Requirements (5 courses):

FSHD 355 Fabric Structure and Design
FSHD 357 Fashion Illustration
FSHD 448 Tailoring and Couture Techniques
FSHD 449 Specialized Apparel Design

## Choose one (1) elective from:

FSHN 229 Cultural Dress
FSHN 250 Special Topics in Fashion
FSHN 290 Study Tour: Fashion
FSHN 350 Special Topics in Fashion
FSHM 241 Omni-channel Fashion Retailing
FSHM 310 Retail Buying and Analysis I
FSHM 326 Fashion Merchandising: Theory and Industry Application
FSHN 354 Advanced Textiles
FSHM 362 World Market: Textiles to Retailing
FSHM 386 Apparel Product Development
FSHM 455 Case Studies in Fashion
FSHD 490 Independent Study in Fashion Design
FSHD 495 Internship in Fashion Design

## MAJOR IN FASHION MERCHANDISING (U_FM)

## Major Required Core (11 Courses):

FSHN 110 Fashion: Designer to Consumer
FSHN 120 Consumer Textiles
FSHN 223 History of Costume or
FSHN 226 History of Textiles
FSHN 245 Research Methods for the Fashion Industry
FSHD 140 Principles of Apparel Construction
FSHM 200 Field Study in Merchandising (No course credit)
FSHM 310 Retail Buying and Analysis I
FSHM 326 Fashion Merchandising: Theory and Industry Application
FSHM 362 World Market: Textiles to Retailing
FSHM 495 Internship in Fashion Merchandising
STAT 107 Business Statistics or
STAT 117 Introduction to Statistics

## Required Capstone Course:

FSHM 464 Fashion Merchandising: Planning, Policies, and Implementation

## CONCENTRATIONS

All students majoring in Fashion Merchandising must choose one (1) of the two concentrations: Retail Merchandising or Product Development.

## Apparel Product Development Concentration (UFMA)

## Concentration Requirements (7 Courses):

FSHN 354 Advanced Textiles
FSHD 205 Essential Methods for Fashion Design
FSHD 243 Advanced Apparel Construction
FSHD 372 Computerized Pattern Design: Gerber
FSHM 386 Apparel Product Development

## Choose One (1) of the following:

FSHM 241 Omni-channel Fashion Retailing
FSHM 346 Retailing and Consumer Behavior
Choose One (1) of the following:
FSHD 352 Draping
FSHD 342 Flat Pattern Design

## Retail Merchandising Concentration (UFMR)

## Concentration Requirements (7 Courses):

FSHM 241 Omni-channel Fashion Retailing
FSHM 346 Retailing and Consumer Behavior
FSHM 410 Retail Buying and Analysis II
FSHM 452 Fashion Promotion
Choose One (1) of the following:
FSHN 208 Sustainability in the Fashion Industry
FSHN 229 Cultural Dress
FSHN 250 Special Topics in Fashion
FSHD 205 Essential Methods for Fashion Design
Choose Two (2) of the following:
FSHN 354 Advanced Textiles
FSHN 350 Special Topics in Fashion
FSHD 330 Digital Tools for the Fashion Industry
FSHM 386 Apparel Product Development
FSHM 455 Case Studies in Fashion
FSHM 490 Independent Study in Fashion Merchandising

## MINORS

## MINOR IN FASHION DESIGN (5 COURSES)

## Required courses:

FSHD 140 Principles of Apparel Construction
Choose four (4) courses from the following:
FSHN 120 Consumer Textiles
FSHD 205 Essential Methods for Fashion Design
FSHD 230 Advanced Apparel Construction
FSHD 330 Digital Tools for the Fashion Industry
FSHD 342 Flat Pattern Design
FSHD 352 Draping
FSHD 355 Fabric Structure and Design
FSHD 357 Fashion Illustration
FSHD 372 Computerized Pattern Design: Gerber
FSHD 448 Tailoring and Couture Techniques
FSHD 449 Specialized Apparel Design

## MINOR IN FASHION MERCHANDISING (5 COURSES)

The minor in Fashion Merchandising is designed for students who want some expertise in the dynamics and functions of the fashion business as an adjunct to their major fields. Students are exposed to national and international fashion merchandising fields through social, cultural, ethical, economic, and technological perspectives. Note: No more than one (1) course credit from a students' major subject area may count towards both their major and this minor.

## Required course:

FSHN 110 Fashion: Designer to Consumer
Choose four (4) courses from the following:
FSHN 120 Consumer Textiles
FSHM 241 Omni-channel Fashion Retailing
FSHN 245 Research Methods for the Fashion Industry
FSHN 250 Special Topics in Fashion
FSHN 290 Study Tour: Fashion
FSHM 310 Retail Buying and Analysis I
FSHM 326 Fashion Merchandising: Theory and Industry Application
FSHM 346 Retailing and Consumer Behavior
FSHM 362 World Market: Textiles to Retailing
FSHN 350 Special Topics in Fashion

## MINOR IN FASHION STUDIES (5 COURSES)

The minor in Fashion Studies offers students a path to become knowledgeable about fashion products, theory, history, culture, and business practices. Students study the global, cultural, and historical importance of fashion and develop ethical practices in the life cycle of fashion production. Students examine how the fashion industry flows from design concepts through the after-life of fashion products and prepare students for careers in the fashion industry and other global businesses. Note: No more than one (1) course credit from a students' major subject area may count towards both their major and this minor.
Required courses:
FSHN 110 Fashion: Designer to Consumer
FSHN 223 History of Costume or
FSHN 226 History of Textiles
FSHN 229 Cultural Dress
Choose two (2) courses from the following:
FSHN 120 Consumer Textiles
FSHN 208 Sustainability in the Fashion Industry
FSHM 241 Omni-channel Fashion Retailing
FSHN 245 Research Methods for the Fashion Industry
FSHM 326 Fashion Merchandising: Theory and Industry Application
FSHN 354 Advanced Textiles

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Course

FSHN 110 Fashion: Designer to Consumer
FSHN 208 Sustainability in the Fashion Industry
FSHN 223 History of Costume
FSHN 226 History of Textiles
FSHN 229 Cultural Dress
RAMS 101FA First-Year Seminar: Topics in Fashion

Domain
III-B
III-B
III-A
III-A
III-C
III-B

## History

## Chair: Maria (Lissa) Bollettino

Professors: Joseph Adelman, Sarah Mulhall Adelman**, Maria (Lissa) Bollettino, Gregory Halfond, Jon Huibregtse<br>Associate Professors: Lori Bihler, Stefan Papaioannou

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-A (Perspectives of the Past) requirement is satisfied through the completion of the History major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## HISTORY MAJOR (U_HI)

History is the study of the human past. Through the careful examination of historical evidence of all kinds from societies and cultures around the world, history opens a window onto the past that helps us understand the complexity of human experience and the world we live in today. The Department of History offers a wide range of courses in American, European, and world history in order to prepare students for successful lives and careers through a program that values academic rigor and excellence in a liberal arts education and fosters responsible citizenship and ethical behavior. The study of history encourages students to appreciate and understand the complexity of the human experience in all parts of the world, to develop skills in research and analysis that enhance critical thinking, to acquire effective communication skills, and to respect diverse opinions and cultural perspectives.

## Departmental Requirements for the Major (11 courses):

Two (2) introductory courses to be apportioned as follows:
(a) One (1) 100-level course with a focus on the United States:

HSTY 111 United States History to Reconstruction
HSTY 112 United States History since Reconstruction
HSTY 120 American Lives
HSTY 165 Slavery, Race, and Rights in American History
HSTY 169 Sex and the Sixties
(b) One (1) 100-level course with a focus outside the United States:

HSTY 102 The Comparative History of World Civilizations
HSTY 105 Europe and the World to circa 1450
HSTY 106 Europe and the World since circa 1450
HSTY 123 Beasts, Battles, and Ballads: Life, Literature, and Art in Medieval Europe
HSTY 133 Latin America, Independence to the Present
HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World
HSTY 149 Twentieth Century China

HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age of Revolutions, 17501850

HSTY 186 History of Modern Violence
Two (2) core courses:
HSTY 225 The Historian's Craft
HSTY 250 Historical Research and Writing

## Capstone (1):

HSTY 450 Seminar in History

Note: All of the above courses, with the exception of the Capstone, should be taken prior to the end of the sophomore year.

## CONCENTRATION IN HISTORY (UHIG)

## Remaining six (6) courses must be at the 290-level or above and be apportioned as follows:

(a) A minimum of one (1) HSTY course at 290 or 300-level (American history)
(b) A minimum of one (1) HSTY course at 290 or 300-level (European history)
(c) A minimum of one (1) HSTY course at 290 or 300-level (World history)

No more than four (4) 200-level courses, including HSTY 225 Historiography and HSTY 250 Historical Research and Writing, may be applied toward completion of major requirements (includes up to two (2) 200-level courses accepted as transfer credits).

The Department also offers History majors a number of internships and independent-study opportunities. History majors who anticipate pursuing graduate study in history are strongly encouraged to study a foreign language through at least the intermediate level.

## Group A - American History:

HSTY 290A Special Topics Seminar in American History
HSTY 302 Colonial America
HSTY 304 Revolutionary America
HSTY 306 The Early American Republic
HSTY 308 American Civil War Era
HSTY 309 Modern United States History: 1945 to the Present
HSTY 313 Civil Rights Movements in the United States
HSTY 317 The Family in American Life
HSTY 323 African-American History
HSTY 331 Harding to Roosevelt: The United States 1920 to 1945
HSTY 340 Industrial Conflict in the United States
HSTY 341 The Consequences of War on Modern America
HSTY 350A Topics in American History
HSTY 360 Media and Communications in American History
HSTY 386 Women in American History
Group B - European History:
HSTY 290E Special Topics Seminar in European History
HSTY 301 Ancient Greece: From the Homeric through the Hellenistic Age
HSTY 305 Ancient Rome: The Republic and the Empire
HSTY 329 The Viking Age
HSTY 349 The "Sixties" in Europe and the United States

HSTY 350E Topics in European History
HSTY 365 The History of Gender, Sexuality, and the Body
HSTY 371 Women in Europe, 1500-2000
HSTY 376 History of Modern France
HSTY 377 History of Medicine and Society in the West - From the Ancient World to Present

HSTY 378 History of the United Kingdom from 1800
HSTY 380 History of Modern Germany
HSTY 381 Remaking Europe: History, Politics, and Culture since World War II
HSTY 382 Empires in Collision: Southeastern Europe, 1683 to the Present
HSTY 384 Revolutionary France (1750-1815)
HSTY 388 Peter to Putin: The History of Modern Russia
HSTY 394 The History of Late Antiquity
Group C - World History:
HSTY 290W Special Topics Seminar in World History
HSTY 303 Native American History, 1500-1800
HSTY 318 The First World War: Conflict, Culture, and Society
HSTY 321 European and American Muslims: A History
HSTY 337 Caribbean History
HSTY 345 Networks and Empires - Economic History of the Atlantic World
HSTY 350W Topics in World History
HSTY 356 Holocaust and Genocide in the 20th Century
HSTY 359 Slavery and Abolition
HSTY 369 History of the Crusades
HSTY 383 Making of the Modern Middle East

## CONCENTRATION IN HISTORY MAJOR/HISTORY TEACHING (UHIT) (WITH MINOR IN SECONDARY EDUCATION)

To be eligible for teacher licensure in History/Social Sciences Grades 5-12 students must complete the History major with History Teaching Concentration (UHIT) plus the minor in secondary education. NOTE: Students are required to maintain a GPA of 3.00 or above within this concentration.

In addition to the requirements for the History Major listed above, the requirements for the History major with a History Teaching Concentration (UHIT) are as follows:

1) Students must also take the following social science courses:

ECON 101 Principles of Macroeconomics
GEOG 110 World Regional Geography
POSC 110 Introduction to American Politics
2) Completion of the Secondary Education minor requirements. Prior to student teaching experience, the student must have taken all of the required education courses, plus nine (9) history courses and two (2) social science courses.
3) Recommended courses:

SOCI 101 Introduction to Sociology or
SOCI 130 Social Problems
A world language course beyond the General Education requirement.

## MINORS

## MINOR IN HISTORY (5 COURSES)

Any five (5) courses from the History Department with a maximum of one (1) internship and one (1) independent study.

## MINOR IN AMERICAN STUDIES (5 COURSES)

To earn an American Studies minor, students must apply in writing to the Chair of either the English or History Department and have a sequence of courses designed and approved to meet specific goals. Applications are available in either Chair's office. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No American Studies minor will be awarded without compliance with the above format.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN LATIN AMERICAN, CARIBBEAN, AND UNITED STATES LATINO STUDIES (5 COURSES)

To earn a Latin American, Caribbean, and United States Latino minor, students must apply in writing to the Chair of the Geography, History, or World Languages Department. Only one (1) course may be taken within the student's major subject area. Courses in the minor also may be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINOR IN MUSEUM STUDIES (MST) (5 COURSES)

Sponsored by the Art and Music, Fashion Design and Retailing, and History departments, this interdepartmental minor requires that students take a minimum of four (4) courses outside of their major subject area, including an internship. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) courses (12 semester hours) in the minor must be taken at Framingham State University.
Please see the Interdisciplinary section of the catalog for course requirements.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

DGHM 146 Introduction to Data Analysis in the Humanities
HSTY 102 The Comparative History of World Civilizations
HSTY 105 Europe and the World to circa 1450
HSTY 106 Europe and the World since circa 1450
HSTY 111 United States History to Reconstruction
HSTY 112 United States History since Reconstruction
HSTY 120 American Lives
HSTY 123 Beasts, Battles, and Ballads: Life, Literature, and Art in Medieval Europe
HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World
HSTY 133 Latin America, Independence to the Present
HSTY 146 Feminism Then and Now: What does the Future Hold?
HSTY 149 Twentieth Century China
HSTY 165 Slavery, Race, and Rights in American History

## Domain(s)

II-A
III-C
III-A
III-A
III-A
III-A
I-B

I-B
III-C
III-A
III-B
III-C
III-A

HSTY 169 Sex and the Sixties III-A

| HSTY 176 Life, Liberty, and the Pursuit of Happiness? The Age <br> of Revolutions, 1750-1850 | III-A |
| :--- | :--- |
| HSTY 186 History of Modern Violence | III-A |
| RAMS 101HI First-Year Seminar: Explorations of the Past | III-A |
| RAMS 102HI First-Year Seminar: Commemoration and How |  |
| We Remember the Past | III-B |
| RAMS 103HI First-Year Seminar: Topics in Cultural History | I-B |

## Interdisciplinary Majors, Minors, and Courses

## BUSINESS AND INFORMATION TECHNOLOGY MAJOR (U_IT)

## (Home Department - Management and Business \& Information Technology)

This major is a collaboration with the Management and Business \& Information Technology and Computer Science departments and provides students with knowledge in both the business and information technology fields. The intent of this program is to prepare the Business and Information Technology program can "bridge the gap" between technology and business. As entry level workers, they are likely to qualify for jobs as systems analysts, Project Management Office administrators, technical trainers, quality assurance analysts and similar roles. As experienced workers, they are likely to move into Project Management, Delivery Assurance and IT Management roles.

## Required Business (UITB) core courses (13):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUIS 411 Information Systems Research
BUIS 460 Information Systems Management
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance I
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
QUAN 201 Quantitative Modeling for Business and Economics
QUAN 202 Statistical Analysis for Business and Economics

## Required Computer Science core courses (6):

CSCI 108 HTML, JavaScript Programming, and Web Site Development

CSCI 120 Introduction to Information Technology
CSCI 130 Computer Science I using JAVA
CSCI 258 Introduction to Operating Systems Using UNIX
CSCI 360 Database Management
CSCI 376 Networking Technologies

## Required Mathematics course (1):

MATH 123 Introduction to Functions*
*Students with a score on the mathematics placement exam which allows them to take MATH 180 Precalculus may substitute MATH 180 Precalculus, or MATH 219 Calculus I for MATH 123 Introduction to Functions.

## LIBERAL STUDIES MAJOR (U_LI)

The Bachelor of Arts, with a Major in Liberal Studies is intended as an opportunity to enable students, under faculty-advisor guidance, to design a unique program of study not readily available within the existing curricular structure of the University. This major aims at providing alternative avenues for accommodating the individual academic interest of students. A student may either (a) pursue in-depth study in an area or areas not presently offered as majors at Framingham State University or (b) may choose a broad spectrum of course work among a number of disciplines in lieu of the traditional onediscipline course of study.

Students in this major have the opportunity to experience a broad course of study in the traditional liberal arts and sciences which fosters skills such as conceptual analysis, critical thinking, disciplined writing, creative problem-solving, ethical and moral reasoning, and strong leadership.

## Prior Learning Assessment

Students accepted into the Liberal Studies major may choose to apply for Prior Learning
Assessment credit (a maximum of eight (8) course-credits). Such credit is awarded through a portfolio assessment process and may be granted for substantive learning that has occurred outside the classroom following high school graduation of completion of the GED.

Credit may be awarded in the following areas:

- Employment
- Community Service
- Independent Learning
- Military Service
- Noncredit Educational Experiences
- Educational Travel

Students who wish to apply for "Prior Learning Assessment" credit must complete the portfolio process within twelve months of matriculation into the Liberal Studies major. "Prior Learning Assessment" credits are only applicable to the Liberal Studies major at Framingham State University (these credits will be removed from the student's academic record should the student change their major).
For additional information regarding the Liberal Studies major, please contact the Liberal Studies coordinator to make an appointment.

## Program Requirements for the Major in Liberal Studies:

- Eleven (11) General Education course-credits including one laboratory science.
- Eleven (11) Open Elective course-credits. A maximum of eight (8) course-credits may be applied toward open electives from "Prior Learning Assessment" course-credits.
- Residency requirements: A minimum of eight (8) course-credits must be taken at the University to complete residency requirements for the degree.
- A minimum of five (5) course-credits must be taken in the concentration, to include two (2) advanced level (300-400) concentration course-credits along with LIBS 450 Seminar in Liberal Studies.


## Major Requirements (10 Course-Credits):

## Two (2) Major Core Requirements:

LIBS 250 Introduction to Research Methods
LIBS 450 Seminar in Liberal Studies

## Concentration in General Studies (ULIG) (8 courses):

Eight (8) concentration courses from at least two (2) but no more than three (3) major academic departments. A total of five (5) course-credits from at least two (2) academic departments must be completed at the advanced level (300-400), two (2) of which must be taken at FSU.

## Concentration in Individualized Studies (ULIS) (8 courses):

Eight (8) concentration courses, of which a minimum of five (5) course credits must be completed at the advanced level ( $300-400$ ). Students must submit an academic plan listing the eight (8) concentration courses for approval to the Liberal Studies Advisory Group prior to starting the desired program. Any changes from the approved academic plan must be submitted to the Liberal Studies Advisory Group for approval prior to enrolling in the course(s).

For additional information regarding the Liberal Studies major, please contact Dr. Kelly Matthews, Liberal Studies Coordinator.

## POST-BACCALAUREATE CERTIFICATE

## PRE-HEALTH STUDIES (CPHA) (7 COURSES)

This is certificate program is intended to meet the needs of students, who have already received a bachelor's degree, to fulfill prerequisites to apply for medical, dental and veterinary school as well as those interested in pharmacy, physician assistant, physical therapy, occupational therapy, and optometry programs. Students will be advised on an individual basis to determine which courses need to be completed for their respective programs. Students will have access to Framingham State's Health Professions Advisory Committee, and, if necessary for a program, the committee recommendation letter process.

This program is designed for students who need the basic science curriculum either as new courses (career changers) or as repeat attempts (GPA enhancement). A GPA of 2.75 overall is required for admission to the program along with two letters of recommendation (no test scores required). Students wishing to take an advanced curriculum are advised to seek a second baccalaureate degree. Students should be aware that most of our classes are offered during the daytime hours, and that this certificate program is part of the day school.

Students who complete seven (7) of the basic core sciences and/or other elective pre-health courses while enrolled in the certificate program at Framingham State University will receive a certification of completion of the program. Students will be required to maintain an overall 3.00 GPA to remain eligible for the program.

Below is a list of courses offered for the certificate. Since health professions programs differ in their requirements, students should contact a pre-health advisor prior to registration.

## The post-baccalaureate certificate requires seven (7) courses from the following:

BIOL 160/160L Introduction to Organismal Biology with Lab or BIOL 130/130L Principles of Biology with Lab

BIOL 161/161L Introduction to Cellular and Molecular Biology with Lab
BIOL 208/208L Genetics with Lab
BIOL 228/228L Microbiology with Lab
BIOL 235/235L Principles of Human Physiology with Lab
BIOL 241/241L Human Anatomy and Physiology I with Lab or
BIOL 233/233L Comparative Vertebrate Anatomy with Lab (suggested for pre-Vet)
BIOL 242/242L Human Anatomy and Physiology II with Lab
BIOL 260/260L Cell Biology with Lab
BIOL 262/262L Molecular Biology with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 207/207L Organic Chemistry I with Lab
CHEM 208/208L Organic Chemistry II with Lab
CHEM 301/301L Biochemistry I with Lab or
CHEM 300/300L Principles of Biochemistry with Lab
HLTH 302 Exercise Physiology (suggested for PT applicants)
MATH 180 Precalculus
MATH 219 Calculus I
MATH 220 Calculus II
NEUR 225 Biopsychology
NUTR 110 Fundamentals of Nutrition Science
PHYS 211/211L Principles of Physics I with Lab
PHYS 212/212L Principles of Physics II with Lab
STAT 117 Introduction to Statistics or
ENVS 202 Data Analysis for Scientists or
STAT 203 Statistics for the Natural Sciences

## INTERDEPARTMENTAL MINORS

An Interdepartmental Minor shall consist of a designated number of courses, which must be taken in at least three different subject areas. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits (12 semester hours) in the minor must be taken at Framingham State University.

The University offers interdepartmental minors in the following areas:

## AMERICAN STUDIES

ARTIFICIAL INTELLIGENCE
BLACK STUDIES
DATA SCIENCE

DIGITAL HUMANITIES

DIVERSITY STUDIES
GENDER STUDIES
INFORMATION TECHNOLOGY
IRISH STUDIES

LATIN AMERICAN, CARIBBEAN, AND UNITED STATES LATINO STUDIES

MEDIA, CULTURE, AND SOCIETY
MUSEUM STUDIES
NEUROSCIENCE
PUBLIC HEALTH
SCIENCE COMMUNICATION

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)
SOCIAL STUDIES
SUSTAINABLE FOOD SYSTEMS
Note: To complete a minor, a minimum of three (3) course credits (12 semester hours) in the minor must be taken at Framingham State University.

## MINOR IN AMERICAN STUDIES (AMS) (5 COURSES)

To earn an American Studies minor, students must have a sequence of courses designed and approved to meet specific goals. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

The minor in American Studies requires five (5) courses representing at least three (3) disciplines, distributed as follows:
A. One (1) of the following courses in American literature:

ENGL 243 The American Short Story
ENGL 261 American Writers I
ENGL 262 American Writers II
B. One (1) American history (HSTY) course at 290 or $300-\mathrm{level}$.
C. A total of three (3) courses from at least two of the following disciplines: (At least three disciplines must be represented in the total of five courses.)

## Art \& Music

ARTH 282 American Art
MUSC 141 American Musics
MUSC 151 The History and Literature of Jazz

## Biology

BIOL 103 Biological Perspectives on Environmental Issues

## Economics

ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics

## English

ENGL 243 The American Short Story
ENGL 260 American Ethnic Literature
ENGL 261 American Writers I
ENGL 262 American Writers II
ENGL 353 Whitman, Dickinson, and Frost
ENGL 365 American Romanticism
ENGL 368 American Realism and Naturalism
ENGL 370 Studies in American Literature
ENGL 373 Modern American Fiction
ENGL 383 Contemporary American Fiction
ENGL 384 Contemporary American Poetry
Geography
GEOG 250 Geography of the United States and Canada
GEOG 251 Geography of New England
History
HSTY 111 United States History to Reconstruction
HSTY 112 United States History since Reconstruction
HSTY 120 American Lives
HSTY 165 Slavery, Race, and Rights in American History
HSTY 290A Special Topics Seminar in American History
HSTY 3xx (Any American history course at the 300-level)

## Sociology

SOCI 130 Social Problems
SOCI 226 Sociology of Rap and Hip Hop
SOCI 255 LGBTQ Communities in the United States
SOCI 264 Black Communities and Institutions
SOCI 288 Immigration in the United States
SOCI 315 Social Class
SOCI 340 Sociology of Work
Interdisciplinary/Interdepartmental:
AMST 490 Independent Study in American Studies

## MINOR IN BLACK STUDIES (BST) (5 COURSES)

The Black studies minor offers an interdisciplinary course of study across the humanities and social sciences. In so doing, it gives students an opportunity to pursue their own interests in Black culture and history in the United States, while at the same time offering an exploration of the implications of the African Diaspora. The core courses give students the foundation to understand Blackness in the United States, and the electives offer a range of courses that students can select depending on their choice of focus. This minor will enable students, regardless of their chosen major, to become more cognizant of how understanding Blackness in the United States is essential to citizenship in a participatory democracy. Students take two (2) core classes and choose three (3) courses from among different subject areas. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

The minor requires five (5) courses as follows:
Two (2) core courses:
COMM 259 African Americans in Television and Radio
SOCI 264 Black Communities and Institutions

## Choose Three (3) from the following courses (each of these should be from a different subject area):

> ARTH 365 Contemporary African-American Art History
> ENGL 246 African American Film
> ENGL 263 African American Women Writers
> ENGL 264 African American Literature
> GEOG 255 Geography of Sub-Saharan Africa
> HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World
> HSTY 165 Slavery, Race, and Rights in American History
> HSTY 323 African-American History
> HSTY 337 Caribbean History
> HSTY 359 Slavery and Abolition
> POSC 270 Race, Politics, and the Law
> SOCI 226 Sociology of Rap and Hip Hop

## MINOR IN ARTIFICIAL INTELLIGENCE (AIN) (5 COURSES)

Sponsored by the Mathematics and Computer Science Departments. Artificial Intelligence has the potential to solve complex problems in a variety of fields. Students successfully completing the minor would gain skills in programing, mathematics, and artificial intelligence. Only two (2) courses may be applied to the student's major requirements. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University. Interested students should contact the chair of the mathematics department.

## The minor requires five (5) courses as follows:

## Four (4) core courses:

MATH 219 Calculus I
MATH 226 Linear Algebra and Applications
CSCI 130 Computer Science I Using Java OR
CSCI 156 Python Programing for Applications
CSCI 300 Artificial Intelligence

## Choose One (1) from the following courses:

CSCI 490 Independent Study in Computer Science
CSCI 495 Internship in Computer Science
DGHM 110 Introduction to Digital Humanities
ENVS 333 Digital Field Methods: Drones, Data, \& Artificial Intelligence
MATH 490 Independent Study in Mathematics
MATH 495 Internship in Mathematics
PHIL 102 Introduction to Ethics: Why Be Moral?
PSYC 236 Psychology of Learning
PSYC 263 Cognitive Psychology

## MINOR IN DATA SCIENCE AND ANALYTICS (DSA) (5 COURSES)

Data science is the study of data from its collection, storage, and retrieval to its analysis and use in decision making. Data scientists use powerful digital tools to analyze vast data sets which may include not just "numbers" but also text, images, and video. Students successfully completing the minor will have the knowledge and expertise to conduct exploratory and confirmatory analyses of these diverse data types and will be able to choose and apply the proper tools to the data at hand, and visualize their results to effectively convey their conclusions to a wide variety of audiences. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses as follows:

## Three (3) required courses:

CSCI 156 Python Programming for Applications
ENVS 202 Data Analysis for Scientists or
STAT 203 Statistics for the Natural Sciences
GEOG 111 Visualizing Social and Environmental Justice

## Choose Two (2) electives from the following list:

ENVS 333 Digital Field Methods: Drones, Data and AI
GEOG 300 Geospatial Applications Using Python
STAT 307 Intermediate Statistics

## MINOR IN DIGITAL HUMANITES (DGH) (5 COURSES)

The minor in Digital Humanities responds to developments across the humanities and in the labor market. Aimed primarily at students in the Humanities, the interdisciplinary minor compliments traditional humanities coursework by stressing technological competencies and the analysis of humanities data. Skills learned in the minor are designed to make students more competitive in the labor market up graduation - a practical consideration reinforced by a required internship. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits (12 semester hours) in the minor must be taken at Framingham State University.

The minor requires five (5) courses as follows:
Three (3) required courses:
DGHM 110 Introduction to Digital Humanities
DGHM 390 Special Topics in Digital Humanities
DGHM 495 Internship in Digital Humanities

## Choose One (1) of the following courses:

CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 140 Introduction to the Internet, Graphics, and Multimedia
CSCI 156 Python Programming for Applications

## Choose One (1) of the following courses:

ARTS 230 Digital Tools for Art and Design
COMM 297 Communication and Social Media
ENGL 286 Professional Writing
ENGL 377 Writing for Online and Social Media
HSTY 190 Introduction to Historical Data Analysis

## MINOR IN DIVERSITY STUDIES (DVS) (5 COURSES)

To earn a Diversity Studies minor, no more than two (2) courses may be taken in a single department. No more than three (3) 100-level courses may be included in the minor. At the discretion of the Chair of the English, History, or Sociology Department, some of the courses taken for undergraduate credit as part of study abroad programs may be used to complete the Diversity Minor. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses from the following list:

## Art \& Music:

ARTH 200 Art and Social Values
ARTH 285 The Art of Asia
ARTH 288 Latin American Art
MUSC 171 World Music Cultures
MUSC 220 Women in Music
Communication, Media, \& Performances:
COMM 234 Intercultural Communication
COMM 245 Cultural Aspects of Media Representation

## English:

ENGL 201 Mythology and Folklore
ENGL 202 Comparative Mythology
ENGL 203 Contemporary Global Literature
ENGL 234 Global Cinema
ENGL 240 LGBTQ Literature
ENGL 260 American Ethnic Literature
ENGL 263 African American Women Writers
ENGL 264 African American Literature
ENGL 277 Gender in Contemporary Global Literature
Fashion Design and Retailing:
FSHN 229 Cultural Dress
Food and Nutrition:
NUTR 262/262L Food, Culture, and Society with Lab

## Geography:

GEOG 110 World Regional Geography
GEOG 180 Native Americans: The Original Injustice on American Soil
GEOG 254 Geography of Monsoon Asia
GEOG 255 Geography of Sub-Saharan Africa
GEOG 256 Geography of the Middle East
GEOG 290 Non-Western Regional Geography: Field Study

## History:

HSTY 102 The Comparative History of World Civilizations
HSTY 149 Twentieth Century China
HSTY 165 Slavery, Race, and Rights in American History
HSTY 303 Native American History, 1500-1800
HSTY 313 Civil Rights Movements in the United States
HSTY 318 The First World War: Conflict, Culture and Society
HSTY 321 European and American Muslims: A History
HSTY 323 African American History
HSTY 337 Caribbean History
HSTY 340 Industrial Conflict in the United States
HSTY 345 Networks and Empires - Economic History of the Atlantic World
HSTY 359 Slavery and Abolition
HSTY 365 The History of Gender, Sexuality, and the Body
HSTY 369 History of the Crusades
HSTY 371 Women in Europe, 1500-2000
HSTY 386 Women in American History
Political Science:
POSC 110 Introduction to American Politics
POSC 120 Introduction to World Politics
POSC 200 Model United Nations
POSC 216 Film and Politics
POSC 250 American Legal Systems
POSC 260 Comparative Political Systems
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
POSC 316 United States Constitutional Law: Civil Liberties
Psychology and Philosophy:
PSYC 212 Adolescent Psychology
PSYC 224 Social Psychology
PSYC 231 Adult Development
PSYC 259 Cultural Psychology
PSYC 286 Psychology of Women
PSYC 354 Psychology of Prejudice
PSYC 369 Human Sexuality

## Sociology and Criminology:

ANTH 161 Cultural Anthropology
ANTH 172 Interpreting the Past: Archaeological Perspectives
ANTH 203 Human Origins
ANTH 207 Global Issues in Anthropology
ANTH 231 Great Discoveries in Global Archaeology

ANTH 243 Native American Cultures
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
ANTH 290 Non-Western Cultural Studies Tour
ANTH 360 Language and Culture
CRIM 120 The Fight for Social Justice: Institutional Battlegrounds
CRIM 211 Crime and Inequality
CRIM 222 Global Criminology
CRIM 270 Social Deviance
CRIM 308 Understanding Violence
CRIM 330 Policing and Society
CRIM 360 Media and Crime
SOCI 101 Introduction to Sociology
SOCI 130 Social Problems
SOCI 203 Introduction to Critical Race Theory
SOCI 212 Sociology of Families
SOCI 218 Women in Society
SOCI 220 Sport in Society
SOCI 226 Sociology of Rap and Hip Hop
SOCI 233 Reproductive Rights and Reproductive Justice
SOCI 245 Race and Ethnicity
SOCI 255 LGBTQ Communities in the United States
SOCI 263 Social Inequality
SOCI 264 Black Communities and Institutions
SOCI 312 Sociology of Childhood and Adolescence
SOCI 315 Social Class
SOCI 325 Health and Illness
SOCI 329 Social Deviance
SOCI 333 Society, Mental Health, and the Individual
SOCI 340 Sociology of Work
SOCI 359 Sex/Sexualities in Society

## World Languages:

CHIN 118 Chinese Writing System and Calligraphy
FREN 201 Intermediate French I
FREN 202 Intermediate French II
LING 110 The Languages of the World
SPAN 201 Intermediate Spanish I
SPAN 202 Intermediate Spanish II
SPAN 435 The Boom in Latin American Literature

## MINOR IN GENDER STUDIES (GTS) (5 COURSES)

To earn a Gender Studies minor, no more than two (2) courses may be taken in a single department. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses as follows:

## One (1) required courses:

ANTH 253 Gender Across Cultures
Four (4) electives from the following list:

## Art \& Music

MUSC 220 Women in Music

## English

ENGL 240 LGBTQ Literature
ENGL 277 Gender in Contemporary Global Literature

## History

HSTY 146 Feminism Then and Now: What Does the Future Hold?
HSTY 169 Sex and the Sixties
HSTY 317 The Family in American Life
HSTY 365 The History of Gender, Sexuality, and the Body
HSTY 371 Women in Europe, 1500 to 2000
HSTY 386 Women in American History
Political Science:
POSC 272 Gender, Politics, and the Law
POSC 316 United States Constitutional Law: Civil Liberties

## Psychology

PSYC 286 Psychology of Women
PSYC 369 Human Sexuality

## Sociology and Criminology

ANTH 258 Critical Approaches to Men and Masculinities
CRIM 321 Intimate Partner Violence
CRIM 336 Sexual Violence
SOCI 218 Women in Society
SOCI 226 Sociology of Rap and Hip Hop
SOCI 233 Reproductive Rights and Reproductive Justice
SOCI 255 LGBTQ Communities in the United States
SOCI 264 Black Communities and Institutions
SOCI 359 Sex/Sexualities in Society

## MINOR IN IRISH STUDIES (IRS) (5 COURSES)

To earn an Irish Studies minor, students must complete five (5) elective courses from the following list, including up to three courses in Irish studies taken abroad at the University of Ulster, subject to approval by the Chair of the English Department. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University. Exceptions to the University's Course Residency requirement may be made by Chair of the English Department in conjunction with the University Registrar.

## The minor requires five (5) courses from the following:

## English

ENGL 232 Irish Literature
ENGL 389 Modern and Contemporary British and Irish Poetry
Environment, Society, \& Sustainability
GEOG 258 Geography of the British Isles

## History

HSTY 378 Modern Britain
Irish Studies
IRST 290 Special Topics in Irish Studies
Sociology and Criminology
SOCI 254 Social Conflict in Northern Ireland and Ireland

## MINOR IN INFORMATION TECHNOLOGY (ITS) (5 COURSES)

To earn a minor in Information Technology, only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits (12 semester hours) in the minor must be taken at Framingham State University.
The minor requires five (5) courses as follows:
Three (3) required courses:
BUIS 200 Introduction to Business Systems
CSCI 120 Introduction to Information Technology
CSCI 140 Introduction to the Internet, Graphics, and Multimedia
Two (2) electives from the following list:
Computer Science:
CSCI 108 HTML, JavaScript Programming, and Web Site Development
CSCI 130 Computer Science I Using Java
CSCI 258 Introduction to Operating Systems using UNIX
CSCI 320 Windows Server and Client Management
CSCI 345 Computer and Network Security
Environment, Society, \& Sustainability:
GEOG 214 Spatial Analysis Using Geographic Information Systems
GEOG 216 Introduction to Geographic Information Systems
GEOG 316 Advanced Geographic Information Systems
GEOG 328 Introduction to Remote Sensing
Mathematics:
STAT 117 Introduction to Statistics or
STAT 203 Statistics for the Natural Sciences
STAT 307 Intermediate Statistics

## MINOR IN LATIN AMERICAN, CARIBBEAN, AND UNITED STATES LATINO STUDIES (LAS) (5 COURSES)

To earn a Latin American, Caribbean, and United States Latino minor, only one (1) course may be taken within the student's major subject area. Courses in the minor also may be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses as follows:

One (1) Portuguese (PORT) or Spanish (SPAN) course at the 100-level or above.
Four (4) additional courses from the list below, representing three or more disciplines:

## Anthropology:

ANTH 313 South American Archaeology

## Art History:

ARTH 288 Latin American Art

## English:

ENGL 361 Postcolonial Literature
Environment, Society, \& Sustainability:
GEOG 257 Geography of Latin America

## History:

HSTY 303 Native American History, 1500-1800
HSTY 337 Caribbean History
HSTY 345 Networks and Empires - Economic History of the Atlantic World
HSTY 359 Slavery and Abolition

## Political Science:

POSC 365 Latin American Politics

## Portuguese:

PORT 101 Elementary Portuguese I
PORT 102 Elementary Portuguese II

## Sociology and Criminology:

SOCI 210 Latinxs in the United States
SOCI 288 Immigration in the United States

## Spanish:

SPAN 101 Elementary Spanish I
SPAN 102 Elementary Spanish II
SPAN 201 Intermediate Spanish I
SPAN 202 Intermediate Spanish II

## MINOR IN MEDIA, CULTURE, AND SOCIETY (MCS) (5 COURSES)

Sponsored by the Communication, Media, \& Performance, and the Sociology \& Criminology departments, this interdisciplinary minor offers students the opportunity to explore the intimate connection between media platforms and institutions on the one hand, and society and culture on the other. The minor requires that students take a minimum of four (4) courses outside of their major subject area. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

The minor requires five (5) courses as follows:

## Two (2) Required Courses:

COMM 250 Media/Society/Self
SOCI 101 Introduction to Sociology
Choose three (3) of the following (at least one (1) of which must be in a subject area other than COMM or SOCI):

ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
ANTH 360 Language and Culture
COMM 202 Global Media
COMM 206 Experimental Film Production
COMM 226 Writing for Visual Media
COMM 242 Environmental Communication
COMM 259 African Americans in Television and Radio
COMM 297 Communication and Social Media
COMM 317 Video Production: Vlogging
COMM 322 Persuasion and Social Influence
COMM 324 Rhetoric and Popular Culture
COMM 366 Documentary Filmmaking
CRIM 211 Crime and Inequality
CRIM 270 Social Deviance
CRIM 313 The Culture of Punishment
CRIM 360 Media and Crime
SOCI 218 Women in Society
SOCI 220 Sport in Society
SOCI 226 Sociology of Rap and Hip Hop
SOCI 245 Race and Ethnicity
SOCI 248 Social Structure and the Self
SOCI 282 Society, Technology, and the Future

## MINOR IN MUSEUM STUDIES (MST) (7 COURSES)

Sponsored by the Art and Music, Fashion Design and Retailing, and History departments, this interdepartmental minor requires that students take a minimum of four (4) courses outside of their major subject area, including an internship. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) courses (12 semester hours) in the minor must be taken at Framingham State University.

The minor requires five (5) courses as follows:

## Two (2) Required Courses:

MUSE 110 Introduction to Museum Studies
MUSE 495 Internship in Museum Studies
Choose one (1) Course in Art History:
ARTH $\qquad$
Choose one (1) Course in History:
HSTY
Choose one (1) of the following:
ANTH 172 Interpreting the Past: Archaeological Perspectives
BIOL 212/212L Wildlife Specimen Preparation Techniques with Lab
ENGL 338 Grant Writing
FSHN 223 History of Costume
FSHN 226 History of Textiles
FSHN 229 Cultural Dress

## MINOR IN NEUROSCIENCE (NEU) (5 COURSES)

Neuroscience is the study of the nervous system, the cells and tissues of which it consists; the thoughts, emotions and behaviors that it manifests and the way it changes due to stimuli from both inside and outside the body. It is an interdisciplinary science that combines aspects of Biology, Psychology, Philosophy, and Chemistry. Neuroscientists examine the development, structure and function of the nervous system, what happens in disease states and mental illness and how different compounds can alter its activity.

Students interested in a minor in Neuroscience should see the chair of either the Biology Department or Psychology and Philosophy Department.
Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## Four (4) Required Courses:

BIOL 142 Introduction to Human Biology or
PSYC 101 General Psychology
NOTE: Student who are not Biology or Psychology majors must take both courses.
NEUR 225 Biopsychology
PHIL 222 Bioethics
PSYC 263 Cognitive Psychology

## One (1) Elective Courses:

From the following list:
BIOL 320 Animal Behavior
NEUR 348 Cognitive Neuropsychology
NEUR 380 Neuropharmacology
NEUR 450 Seminar in Neuroscience
NEUR 490 Independent Study in Neuroscience
NEUR 495 Internship in Neuroscience
PSYC 245 Health Psychology
PSYC 280 Sensation and Perception

## MINOR IN PUBLIC HEALTH (5 COURSES)

To earn a minor in Public Health, students must apply in writing to the chair of the Nutrition \& Health Studies Department. To complete the minor, no more than two (2) required courses from major requirements may count towards minor. Courses in the minor may be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses as follows:

A. Two (2) required courses:

HLTH 110 Wellness for Life
HLTH 222 Public Health and Epidemiology
B. Choose three (3) additional courses from the list below, at least two of which must be at the 200-level or above, with one (1) course from each category:

## Category 1: Health Promotion/Disease Prevention/Communications

HLTH 206 Wellness Behavior
HLTH 326 Drugs, Alcohol, and Addictive Behavior
HLTH 390 Special Topics in Health and Wellness
NEUR 225 Biopsychology
NUTR 333 Nutrition and Chronic Disease
NUTR 478 Community Nutrition
PSYC 245 Health Psychology
SOCI 325 Health and Illness
SOCI 333 Society, Mental Health, and the Individual
SOCI 366 Death and Dying
COMM 215 Science Communication
COMM 322 Persuasion and Social Influence
COMM 328 Argumentation and Advocacy
ENGL 225 Introduction to Journalism
ENGL 286 Professional Writing
ENGL 311 Writing About Science
ENGL 338 Grant Writing
ENGL 377 Writing for Online and Social Media
ENVS 202 Data Analysis for Scientists
GLST 201 Research Methods: Case Studies in Globalization
HLTH 430 Research Methods in Health and Wellness
STAT 107 Business Statistics
STAT 117 Introduction to Statistics
STAT 157 Probability and Statistics
STAT 203 Statistics for the Natural Sciences

Category 2: Global and Environmental Health
ANTH 207 Global issues in Anthropology
BIOL 103 Biological Perspectives on Environmental Issues
BIOL 248/248L Principles of Ecology with Lab
CHEM 101 The Chemistry of Life
CHEM 131/131L Science Environment and Health with Lab
EASC 408 Climatology and the Future of Human Society
FDSC 151 Principles of Food Science
FDSC 161/161L Introduction to Food Science and Technology with Lab
GEOG 208 The Environment, Health, and Disease
GEOG 216 Introduction to Geographical Information Systems
GEOL 233 Environmental Geology
NUTR 208 Food System Sustainability
Category 3: Public Policy, Law \& Ethics
ECON 200 The Economics of Globalization
ECON 220 Health Economics
ECON 333 Environmental Economics
ENVS 101 Introduction to Environmental Science and Policy
GEOG 235 Environmental Law and Policy
PHIL 222 Bioethics
PHIL 234 Environmental Ethics
POSC 229 Public Policy Analysis
POSC 270 Race, Politics, and the Law
POSC 325 Public Management
SOCI 230 Law and Society
SOCI 245 Race and Ethnicity
SOCI 263 Social Inequality

## MINOR IN SCIENCE COMMUNICATION (SCM) (5 COURSES)

To declare a Science Communication minor, students must complete the appropriate form and obtain the signature of one of the following department chairs: Communication, Media, \& Performance, English, or Environment, Society, \& Sustainability. Students should meet with an advisor in the minor to design a plan for completing the minor. The specific courses taken depend in part on the student's major. To complete the minor, four (4) of the five (5) courses must be taken outside the student's major department. No Science Communication minor will be awarded without compliance with the above format.

The minor in Science Communication consists of three (3) required courses, one (1) additional course in written, oral, or visual communication, and one (1) additional science course beyond the General Education requirements of Domain II-B, as follows:

## The minor requires five (5) courses as follows:

## A. Three (3) required courses:

COMM 215 Science Communication
ENGL 311 Writing about Science
SCOM 495 Internship in Science Communication

* Upon request, internships will be arranged for students who meet the prerequisites for SCCO 495. Application and deadline information is available on the program website.


## B. One additional course in written, oral, or visual communication:

Note: Science Communication is an interdepartmental minor, and as such, students may only take one course from their major to count toward this minor. Accordingly, Communication Arts majors may not take courses in this group with a COMM prefix and English majors may not take courses with an ENGL prefix to satisfy requirements for this minor.
COMM 107 Effective Speaking
COMM 130 Visual Communication
COMM 201 Oral Interpretation of Literature
COMM 213 Advanced Public Speaking
COMM 214 Introduction to Acting
COMM 226 Writing for Visual Media
COMM 260 Voice and Articulation
COMM 280 Introduction to Film Production
COMM 328 Argumentation and Advocacy
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 286 Professional Writing
ENGL 335 Feature Writing
ENGL 372 Technical Writing
ENGL 377 Writing for Online and Social Media
C. One (1) additional science course beyond the General Education requirements of Domain II-B:

> Upon completion of Domain II-B General Education Requirements, students must take one (1) other science course from the list below. The course must have a prefix different from their major and from the other General Education courses they have completed.

ASTR 128 Solar System Astronomy
ASTR 230 Stars and Galaxies
BIOL 101/101L Biological Concepts with Lab or
BIOL 109/109L Introduction to Biological Science with Lab or
BIOL 130/130L Principles of Biology with Lab
BIOL 103 Biological Perspectives on Environmental Issues
BIOL 114 A Human Perspective on Genetics
BIOL 142/142L Introduction to Human Biology with Lab
BIOL 160/160L Introduction to Organismal Biology with Lab
BIOL 203 Plants and Society
CHEM 101 The Chemistry of Life
CHEM 103/103L Introductory Chemistry with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 131/131L Science - Environment and Health with Lab
EASC 101 Climate Change is Now: An Introduction to Earth Systems
EASC 108 Understanding the Weather: Introduction to Meteorology
EASC 118 Our Blue Planet: An Introduction to Oceanography
ENVS 101 Introduction to Environmental Science and Policy
FDSC 151 Principles of Food Science
FDSC 161/161L Introduction to Food Science and Technology with Lab
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab
GEOL 208/208L Principles of Physical Geology with Lab
NUTR 110 Fundamentals of Nutrition Science
PHSC 109 Introduction to Physical Science (with Lab)

PHYS 111/111L Physics, Nature and Society with Lab
PHYS 201/201L Physics with Applications to Earth and Life Systems with Lab
PHYS 211/211L Principles of Physics I with Lab
NOTE: Students in this minor are also recommended to take a course in statistics.

## MINOR IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS - STEM (STM) (6 COURSES)

This minor is for students who are interested in establishing increased scientific knowledge and literacy, beyond the General Education requirements. Courses in this minor may also count for General Education and major requirements. Students interested in this minor are encouraged to see the chair of one of the following departments: Biology, Chemistry and Food Science, Food and Nutrition, or Environment, Society, \& Sustainability. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor in STEM requires six (6) courses representing at least four (4) disciplines, as indicated by subject prefix code:

ASTR 128 Solar System Astronomy
ASTR 218 Principles of Solar System Astronomy
ASTR 230 Stars and Galaxies
BIOL 101/101L Biological Concepts with Lab
BIOL 103 Biological Perspectives on Environmental Issues
BIOL 109/109L Introduction to Biological Science with Lab
BIOL 114 A Human Perspective on Genetics
BIOL 142/142L Introduction to Human Biology with Lab
BIOL 203 Plants and Society
CHEM 101 The Chemistry of Life
CHEM 103/103L Introductory Chemistry with Lab
CHEM 107/107L Principles of Chemistry with Lab
CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab
CHEM 131/131L Science-Environment and Health with Lab
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab
CSCI 111 Computational Thinking: Building Robots and Games
CSCI 138 Information Technology and the Environment
CSCI 140 Introduction to the Internet, Graphics, and Multimedia
CSCI 156 Python Programming for Applications
EASC 101 Climate Change is Now: An Introduction to Earth Systems
EASC 118 Our Blue Planet: An Introduction to Oceanography
EGNR 101 Introduction to Engineering
ENVS 101 Introduction to Environmental Science and Policy
FDSC 151 Principles of Food Science
FDSC 161/161L Introduction to Food Science and Technology with Lab
GEOG 111 Visualizing Social and Environmental Justice
GEOL 108/108L Our Dynamic Planet: Introduction to Physical Geology with Lab
GEOL 208/208L Principles of Physical Geology with Lab
HLTH 110 Wellness for Life
HLTH 140 Introduction to Exercise Science
MATH 105 Quantitative Reasoning

MATH 123 Introduction to Functions
NUTR 110 Fundamentals of Nutrition Science
NUTR 262/262L Food, Culture, and Society with Lab
PHSC 109 Introduction to Physical Science
PHYS 111/111L Physics, Nature, and Society with Lab
STAT 117 Introduction to Statistics

## MINOR IN SOCIAL STUDIES (SST) (5 COURSES)

Sponsored by the History and Environment, Society, \& Sustainability Departments, this interdepartmental minor requires that students take a minimum of four (4) courses outside of their major subject area. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill General Education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## Five (5) Required Courses:

ECON 101 Principles of Macroeconomics
GEOG 110 World Regional Geography
HSTY 112 United States History since Reconstruction or
HSTY 165 Slavery, Race and Rights in American History
POSC 110 Introduction to American Politics

## Choose One (1) Elective Courses:

One (1) 200-level course or higher in History (HSTY) or Geography (GEOG)
Recommended additional course:
SOCI 101 Introduction to Sociology or SOCI 130 Social Problems

## MINOR IN SUSTAINABLE FOOD SYSTEMS (SFS) (5 COURSES)

Sponsored by the Nutrition \& Health Studies and Environment, Society, \& Sustainability Departments, this interdepartmental minor offers students the opportunity to explore the interdisciplinary challenges and opportunities to achieving a sustainable food system. The minor requires that students take a minimum of four (4) courses outside of their major subject area. Only one (1) course may be taken within the student's major subject area. Courses in the minor may also be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.

## The minor requires five (5) courses as follows:

## Three (3) required courses:

BIOL 203 Plants and Society
ENVS 101 Introduction to Environmental Science and Policy
NUTR 208 Food System Sustainability

## Choose two (2) electives from the following list, representing two different departments:

Accounting, Economics, and Finance
ECON 333 Environmental Economics

## Biology

BIOL 228/228L Microbiology with Lab
BIOL 248/248L Principles of Ecology with Lab
BIOL 291 Principles of Tropical Ecology \& Conservation: Field Study

## Chemistry and Food Science

CHEM 131/131L Science - Environment and Health with Lab
FDSC 151 Principles of Food Science OR
FDSC 161/161L Introduction to Food Science and Technology with Lab FDSC 413/413L Food Safety and Microbiology with Lab

## Communication, Media, and Performance:

COMM 215 Science Communication
COMM 242 Environmental Communication

## Computer Science

CSCI 138 Information Technology and the Environment

## English

ENGL 238 Environmental Literature
ENGL 311 Writing About Science
Environment, Society, \& Sustainability:
EASC 101 Climate Change is Now: An Introduction to Earth Systems OR
EASC 201 Principles of Earth System Science
EASC 308 Climatology and the Future of Human Society
ENVS 218 Energy Science and Policy: The Pursuit of Sustainability
ENVS 246 Sustainability and Social Justice
ENVS 272 Global Environmental Issues
GEOG 216 Introduction to Geographical Information Systems
GEOG 235 Environmental Law and Policy
GEOG 238 Environmental Geography
GEOG 375 Sustainable Management of Natural Resources
GEOG 380 Making Places Sustainable
GEOL 233 Environmental Geology
PHYS 111/111L Physics, Nature, and Society
Food and Nutrition
HLTH 222 Public Health and Epidemiology
NUTR 110 Fundamentals of Nutrition Science
NUTR 262/262L Food, Culture, and Society with Lab
Psychology and Philosophy
PHIL 222 Bioethics
PHIL 234 Environmental Ethics

## Sociology and Criminology

ANTH 207 Global Issues in Anthropology
SOCI 204 Environmental Sociology
SOCI 205 Geographic Information Systems Mapping for the Social Sciences
SOCI 300 Animals and Society

# Management and Business \& Information Technology 

Chair: John Palabiyik

Associate Professors: Borga Deniz, Karen Druffel**, Erastus Ndinguri, Jorge Riveras<br>Assistant Professors: John Palabiyik*, Richard Rabin

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-A (Analysis. Modeling, and Problem Solving) requirement is satisfied through the completion of the major in Business \& Information Technology or Management. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of major in Hospitality \& Tourism Management, International Business, or Sports Management.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Majors

The Department of Management and Business \& Information Technology offers a Bachelor of Science (B.S.), with majors in Business Information \& Technology, Hospitality \& Tourism Management, International Business, and Management.

## Related Minors

Students are encouraged but not required to select a minor. A number of minors offered may enhance the students' preparation for their individual employment or graduate school goals. Students should discuss these possibilities with their academic advisors.

## HOSPITALITY AND TOURISM MANAGEMENT MAJOR (U_HT)

The Hospitality and Tourism Management major within the Management and Business \& Information Technology Department prepares students for a wide range of positions within hotels, resorts, spas, country clubs, restaurants, catering operations, cruise lines, casinos, travel and tourism organizations, convention services, event and wedding planning, and recreation facilities. Courses within the major expose students to the various management functions in the hospitality industry including lodging operations, food and beverage operations, customer service, marketing, human resources, financial management, technology use and management, legal and ethical regulation, facilities management, and strategy.

## Learning Outcomes

1. Students will understand the full extent, organization, structure and impact of the global hospitality industry.
2. Students will be able to apply critical-thinking, decision making, and problem-solving to current global issues in the hospitality industry.
3. Students will be able to demonstrate written and oral communication skills appropriate for multiple situations and audiences.
4. Students will be able to determine and use appropriate conflict management techniques within both multi-cultural employee teams and customers.
5. Students will be able to identify legal and ethical issues implicit in all aspects of the hospitality industry.
6. Students will be able to operate and utilize information systems typically used in the hospitality industry.
7. Students will be able to manage facilities and human resources effectively.
8. Students will be able to operate as an entry-level supervisor in operational departments within the hospitality industry.

## Requirements for Major (UHTG):

## Required Courses (17 courses (16 course-credits)):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
HTMG 100 Field Experience in Hospitality and Tourism (non-credit)
HTMG 101 Introduction to Hospitality and Tourism
HTMG 113 Economics of Hospitality and Tourism
HTMG 202 Food and Beverage Management
HTMG 212 Hotel and Lodging Management
HTMG 222 Sales and Marketing for Hospitality and Tourism
HTMG 303 Financial Management for the Hospitality Industry
HTMG 313 Human Resources Management for the Hospitality and Tourism Industry
HTMG 323 Hospitality and Tourism Law
HTMG 404 Facilities Management in Hospitality and Tourism
MGMT 280 Organizational Behavior
MGMT 485 Business Policy and Strategy
MRKT 181 Marketing Principles
STAT 107 Business Statistics

## INTERNATIONAL BUSINESS MAJOR (U_IB)

As the global economy continues to expand, the demand for international business education is higher than ever and expected to increase. As a specialist who understands the diversity of international business - and is prepared with a strong business background - an international business major is positioned to be a valuable participant in global business ventures.

## Major Required Core (13):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUAN 204 Analytical Techniques for Business
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
STAT 107 Business Statistics

## Required Capstone Course:

MGMT 485 Business Policy and Strategy

## General Studies Concentration (UIBG) (5):

ECON 414 International Finance
MGMT 242 Globalization of Business
MGMT 308 Managing Across Cultures
MGMT 412 International Business
MRKT 318 International Marketing

## MANAGEMENT MAJOR (U MG)

## Major Required Core (13):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUAN 204 Analytical Techniques for Business
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
STAT 107 Business Statistics

## Required Capstone Course:

MGMT 485 Business Policy and Strategy

## MANAGEMENT CONCENTRATIONS

All Management majors need to select a concentration from the four (4) listed as follows:

## ENTREPRENEURSHIP (UMGE) (6)

Three (3) Required courses:
ENTR 300 Entrepreneurship: Starting Your Business
ENTR 301 Cultivating and Managing Innovation
ENTR 495 Entrepreneurship Practicum or MGMT 495 Internship in Management
Choose three (3) elective course from:
ACCT 428 Taxation
ENTR 302 Social Entrepreneurship
ENTR 495 Entrepreneurship Practicum or
MGMT 495 Internship in Management
MGMT 300 Doing Business Abroad
MGMT 308 Managing Across Cultures
MRKT 310 Marketing Research
MRKT 308 Digital and Social Media Marketing

## MANAGEMENT (UMGG) (6)

## Three (3) Required courses:

MGMT 308 Managing Across Cultures
MGMT 381 Human Resource Management
MGMT 412 International Business
Choose three (3) electives 300-level or above from:
ENTR $\qquad$ Entrepreneurship Elective (Must be 300-level or above)

MGMT $\qquad$ Management Elective (Must be 300-level or above)

## SPORTS MANAGEMENT MAJOR (U_SM)

## Major Required Core (12):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUAN 204 Analytical Techniques for Business
BUIS 200 Introduction to Business Systems
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
STAT 107 Business Statistics
Required Capstone Course:
MGMT 485 Business Policy and Strategy

## CONCENTRATION

## SPORTS MANAGEMENT GENERAL (USMG) (7)

## Required Concentration courses:

ECON 323 The Economics of Sport
HLTH 321 Mental Dynamics in Sport and Physical Activity or HLTH 360 Meaningful Play
SOCI 220 Sport in Society
SPMG 262 The Business of Fantasy \& eSports
SPMG 301 Sport Management
SPMG 321 Sport and Facility Management
SPMK 324 Sports Marketing

## BUSINESS AND INFORMATION TECHNOLOGY MAJOR (U_IT)

## (Home Department - Management and Business \& Information Technology)

This major is a collaboration with the Management and Business \& Information Technology and Computer Science departments and provides students with knowledge in both the business and information technology fields. The intent of this program is to prepare the Business and Information Technology program can "bridge the gap" between technology and business. As entry level workers, they are likely to qualify for jobs as systems analysts, Project Management Office administrators, technical trainers, quality assurance analysts and similar roles. As experienced workers, they are likely to move into Project Management, Delivery Assurance and IT Management roles.
Please see the Interdisciplinary section of the catalog for course requirements.

## MINORS

## MINOR IN BUSINESS (5 COURSES)

This minor is not open to Business \& Information Technology majors.

## The minor requires five (5) courses as follows:

## Four (4) required courses:

ACCT 220 Introduction to Financial Accounting
ECON 101 Principles of Macroeconomics or
ECON 102 Principles of Microeconomics
MGMT 280 Organizational Behavior
MRKT 181 Marketing Principles

## Choose One (1) elective from the following list:

ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics or
ECON 102 Principles of Microeconomics
MGMT 215 Legal Environment of Business
MGMT 381 Human Resource Management

## MINOR IN ENTREPRENEURSHIP (5 COURSES)

This minor is not open to Management Majors with a concentration in Management or Entrepreneurship.

The minor requires five (5) courses as follows:

## Three (3) required courses:

ENTR 300 Entrepreneurship: Starting your Business
ENTR 301 Cultivating and Managing Innovation
ENTR 302 Social Entrepreneurship

## Two (2) electives from the following list:

ENTR 495 Entrepreneurship Internship Practicum
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
SOCI 306 Nonprofit Giving

## MINOR IN HOSPITALITY \& TOURISM MANAGEMENT (5 COURSES)

The minor requires five (5) courses as follows:
One (1) required courses:
HTMG 101 Introduction to Hospitality and Tourism

## Choose two (2) electives from the following list:

HTMG 113 Economics of Hospitality and Tourism
HTMG 128 Exploring Massachusetts Heritage Tourism
HTMG 202 Food and Beverage Management
HTMG 212 Hotel and Lodging Management
HTMG 222 Sales and Marketing for Hospitality and Tourism
HTMG 303 Financial Management for the Hospitality Industry
HTMG 313 Human Resources Management for the Hospitality and Tourism Industry
ENTR 301 Cultivating and Managing Innovation
ENTR 302 Social Entrepreneurship

## Choose two (2) electives from the following list:

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUIS 200 Introduction to Business Systems
ENTR 300 Entrepreneurship: Starting Your Business
HTMG 323 Hospitality and Tourism Law
MGMT 280 Organizational Behavior
MGMT 308 Managing Across Cultures
MGMT 321 Sport Facility and Event Management
MRKT 181 Marketing Principles

## MINOR IN INTERNATIONAL BUSINESS (5 COURSES)

## The minor requires five (5) courses as follows:

Three (3) required courses:
MGMT 242 Globalization of Business
MGMT 280 Organizational Behavior
MRKT 181 Marketing Principles

Two (2) electives from the following list:
ECON 414 International Finance
MGMT 300 Doing Business Abroad* $\dagger \ddagger$
MGMT 308 Managing Across Culture* $\dagger$
MGMT 412 International Business *
MGMT 495 Internship in Management
MRKT 318 International Marketing $\ddagger$
*Management majors in General Concentration who minor in International Business may not count MGMT 300, MGMT 308, or MGMT 412 towards the minor.
$\dagger$ Management majors in Entrepreneurship Concentration who minor in International Business may not count MGMT 300 or MGMT 308 towards the minor.
$\neq$ Marketing majors who minor in International Business may not count either MGMT 300 or MRKT 318 towards the minor.

## MINOR IN SPORTS MANAGEMENT (5 COURSES)

The minor requires five (5) courses as follows:

## Four (4) required courses:

MRKT 181 Marketing Principles
SPMG 301 Sport Management
SPMG 321 Sport Facility and Event Management
SPMK 324 Sports Marketing
One (1) electives from the following list:
ECON 323 The Economics of Sports
MGMT 280 Organizational Behavior
MGMT 300 Doing Business Abroad
SOCI 220 Sport in Society
SPMG 262 The Business of Fantasy and eSports

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Course

BUAN 204 Analytical Techniques for Business
HTMG 101 Introduction to Hospitality and Tourism
HTMG 128 Exploring Massachusetts Heritage Tourism

## Domain

II-A
III-B
III-A

## Marketing

Chair: Zahra Tohidinia

Professors: Michael J. Harrison**, Sandra S. Rahman*
Assistant Professors: Zahra Tohidinia**, Ella Karat
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## Majors

The Department of Marketing offers a Bachelor of Science (B.S.), with a major in Marketing.

## The General Education Requirement

All students must satisfy a general education requirement consisting of eleven (11) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of major in Marketing.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Related Minors

Students are encouraged but not required to select a minor. A number of minors offered may enhance the students' preparation for their individual employment or graduate school goals. Students should discuss these possibilities with their academic advisors.

## MARKETING MAJOR (U_MK)

## Major Required Core (13):

ACCT 220 Introduction to Financial Accounting
ACCT 221 Introduction to Managerial Accounting
BUAN 204 Analytical Techniques for Business
BUIS 200 Introduction to Business Systems
ECON 101 Principles of Macroeconomics
ECON 102 Principles of Microeconomics
FINA 248 Managerial Finance
MGMT 215 Legal Environment of Business
MGMT 280 Organizational Behavior
MGMT 372 Operations Management
MRKT 181 Marketing Principles
STAT 107 Business Statistics
Required Capstone Course:
MRKT 480 Strategic Marketing

## CONCENTRATIONS

## General Marketing Concentration (UMKG) (6)

Concentration Core Requirements:
MRKT 240 Consumer Behavior
MRKT 301 Brand Management
MRKT 308 Digital and Social Media Marketing
Choose three (3) electives 300-level or above from:
COMM 231 Advertising Techniques
COMM 275 Public Relations
MGMT 300 Doing Business Abroad
MRKT 218 Personal Branding and Business Etiquette
MRKT 310 Marketing Research
MRKT 313 Advertising and Promotions
MRKT 318 International Marketing
MRKT 410 Advanced Marketing Research
MRKT 495 Internship in Marketing
SMKT 212 Sales Skills
SPMK 324 Sports Marketing

Sales Marketing Concentration (UMKS) (6)
Concentration Core Requirements:
MRKT 240 Consumer Behavior
MRKT 301 Brand Management
MRKT 308 Digital and Social Media Marketing
SMKT 212 Sales Skills
SMKT 312 Advanced Sales Skills
SMKT 360 Sales Management and Leadership

## MINORS

## MINOR IN MARKETING (MRK) (5 COURSES)

The minor requires five (5) courses as follows:
Two (2) required courses:
MRKT 181 Marketing Principles
MRKT 301 Brand Management
Choose Three (3) electives from the following list:
COMM 231 Advertising Techniques or
MRKT 313 Advertising and Promotions

COMM 275 Public Relations<br>MRKT 218 Personal Branding and Business Etiquette<br>MRKT 240 Consumer Behavior<br>MRKT 308 Digital and Social Media Marketing<br>MRKT 310 Marketing Research<br>MRKT 318 International Marketing<br>MRKT 410 Advanced Marketing Research<br>MRKT 480 Strategic Marketing<br>MRKT 495 Internship in Marketing<br>SPMK 324 Sports Marketing

## MINOR IN SALES (SLS) (5 COURSES)

The minor requires five (5) courses as follows:
Four (4) required courses:
MRKT 181 Marketing Principles
SMKT 212 Sales Skills
SMKT 312 Advanced Sales Skills
SMKT 360 Sales Management and Leadership

Choose One (1) elective from the following list:
COMM 322 Persuasion and Social Influence
COMM 357 Strategic Communication
SMKT 495 Internship in Sales

## Mathematics

Chair: Michael Krul

Professors: Julie L. Levandosky, Sarah L. Mabrouk, Robert G. Page Jr., Mohammad Salmassi<br>Associate Professor: Sheree Arpin, Benjamin Atchison, Michael Krul, Nicholas Sedlock<br>Assistant Professors: Matthew C. Moynihan, Christopher Staniszewski*, Njesa A. Okoro Totty<br>Instructor: Ronald Tiberio

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-A (Analysis, Modeling, and Problem Solving) requirement is satisfied through the completion of the Mathematics major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Math Placement Testing

FSU Mathematics Placement Pilot - for eligibility to enroll in MATH and STAT courses at Framingham State University.
I. Numbers, Arithmetic, Algebra (NAA): to determine if Recitation sections of 100-level MATH and STAT courses are required.
A. Two tiers of scoring:

1. Scores $<70 \%$ : Recitation 100 -level course required.
2. Scores $\geq 70 \%$ : Eligibility to enroll in 100 -level MATH and STAT courses other than MATH 180 Precalculus and STAT 157 Probability and Statistics; no recitation required for 100-level courses; may take Functions Placement Exam.
II. Functions (FNC): to determine eligibility beyond MATH 123 Introduction to Functions.
A. Three tiers of scoring:
3. Scores $<40 \%$ : Eligibility to enroll in MATH 123 Introduction to Functions without Recitation.
4. Scores $\geq 40 \%$ and $<70 \%$ : Eligibility to enroll in MATH 180 Precalculus, STAT 157 Probability and Statistics, and STAT 203 Statistics for the Natural Sciences.
5. Scores $\geq 70 \%$ : Eligibility to enroll in MATH 219 Calculus I and MATH 206 Discrete Mathematics I (recommended consultation with the Mathematics Department).
Placement Exams are available on Canvas, offered at specific times during the calendar year; a single retake is possible upon request (must be completed during regular offerings).

Placement Policies: based on incoming HS GPA, adjusted.

- All STEM and AEF majors must take the NAA Placement Exam.
- All incoming students with High School GPA < 3.0: Must complete the NAA Placement Exam in order to be eligible for a 100 -level MATH or STAT course without Recitation.
o If no NAA Placement Exam score is recorded, students are placed into Recitation sections of 100 -level MATH or STAT courses and may not enroll in MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, or STAT 157 Probability and Statistics.
- All incoming students with High School GPA $\geq 3.0$ : Eligible for any 100 -level MATH or STAT course without Recitation other than MATH 120 Mathematics for Elementary Educators II, MATH 123 Introduction to Functions (with or without recitation), MATH 180 Precalculus, and STAT 157 Probability and Statistics.
o All students interested in enrolling in MATH 123 Introduction to Functions must take the NAA Placement Exam.

```
Mathematics _PMTH - Mathematics Placement based on High School GPA of 3.00
    PNAA - FSU Math Placement Exam - Numbers, Arithmetic, Algebra (NAA)
    If displayed on degree audit, the PNAA code takes precedence over the PMTH code.
    PFNC - FSU Math Placement Exam - Functions (FNC)
    If displayed on degree audit, the PFNC code takes precedence over the PNAA code.
    PTTR - Math Placement based on Transfer Credit
    NOTE:Students are Excluded from MATH 123, 180, STAT }157\mathrm{ as they must take the NAA
    Exam, if MATH 123 was not accepted in Transfer.
```

Placement and Placement Code Explanation
Code

## PMTH:

10.0 Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
NOTE: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
10.3 Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation required.

Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam.
Note: All students interested in MATH 123 must take the Placement Exam regardless of PMTH code.

## PNAA:

11.0/11.3 Completed FSU Math Placement NAA Exam.

Eligible to enroll in MATH 105R, MATH 110R, MATH 123R, STAT 107R, STAT 117R with Recitation
12.0/12.3 Completed FSU Math Placement NAA Exam.

Eligible to enroll in MATH 105, MATH 110, MATH 123, STAT 107, STAT 117 - No Recitation Required
(Excludes enrollment in MATH 180, STAT 157).
Note: Students are encouraged to take the FSU Math Placement FNC exam to determine eligibility beyond MATH 123
PFNC:
13.0/13.3 Eligible to enroll in MATH 123 - No Recitation Required.
14.0/14.3 Eligible to enroll in MATH 180, STAT 157, STAT 203.
15.0/15.3 Eligible to enroll in MATH 219, MATH 206 (Upon consultation with the Math Dept).

## PTTR:

0.0 No prior math transfer coursework received.

Eligible to enroll in MATH 105R, MATH 110R, STAT 107R, STAT 117R with Recitation (Excludes MATH 123R).
Note: Students are encouraged to take the FSU Math Placement exam to possibly place out of the Math with Recitation requirement.
17.0 Remedial Mathematics Coursework completed at previous institution. Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.
19.0 Indicates college-level math course has been accepted in transfer.

Eligible to enroll in MATH 105, MATH 110, STAT 107, STAT 117 - No Recitation Required
Note: Students are Excluded from MATH 123, 180, STAT 157 as they must take the NAA Exam, if MATH 123 was not accepted in Transfer.

## MATHEMATICS MAJOR (U_MA)

## All students must complete the following eight (8) core courses:

MATH 206 Discrete Mathematics I
MATH 219 Calculus I
MATH 220 Calculus II
MATH 221 Calculus III
MATH 226 Linear Algebra and Applications
MATH 419 Abstract Algebra I
STAT 157 Probability and Statistics
One (1) computer science course

## CONCENTRATIONS IN MATHEMATICS

## GENERAL (UMAG) (6):

In addition to the eight (8) major core requirements, each student must complete:
Concentration core:
MATH 427 Real Analysis
Five (5) mathematics or statistics electives from the following:
MATH 222 Differential Equations
Any mathematics or statistics courses at the 300-level or above

## MATHEMATICS WITH MINOR IN SECONDARY EDUCATION (UMAT):

In addition to the eight (8) major core requirements, each student must complete: Concentration core:

MATH 317 Higher Geometry
MATH 322 History of Mathematics
MATH 427 Real Analysis Three (3) mathematics or statistics electives from the following:

MATH 222 Differential Equations
Any mathematics or statistics courses at the 300-level or above

## Choose Option A or B:

## Option A: Teacher of Mathematics 5-8

EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 323 Secondary Methods with Field Study II: Mathematics Grades 5-8/8-12
EDPS 423A Secondary Professional Practicum A:
Mathematics Grades 5-8 (2 course-credits)
EDPS 423B Secondary Professional Practicum B:
Mathematics Grades 5-8 (2 course-credits)
PSYC 200 Psychology of Development

Option B: Teacher of Mathematics 8-12
EDUC 200 Education in American Society with Field Study I
EDUC 246 Sheltered English Immersion in Secondary Education
EDIL 302 Secondary Methods with Field Study II: Special Needs and Educational Technology
EDIL 323 Secondary Methods with Field Study II: Mathematics Grades 5-8/8-12
EDPS 424A Secondary Professional Practicum A:
Mathematics Grades 8-12 (2 course-credits)
EDPS 424B Secondary Professional Practicum B:
Mathematics Grades 8-12 (2 course-credits)
PSYC 200 Psychology of Development

## MINORS

## MINOR IN MATHEMATICS (5 COURSES)

## Required courses:

MATH 219 Calculus I
One (1) mathematics course at or above the 200-level or one (1) of the following:
STAT 107 Business Statistics
STAT 117 Introduction to Statistics
STAT 157 Probability and Statistics
STAT 203 Statistics for the Natural Sciences
Three (3) additional mathematics courses at or above the 200-level.
These courses are to be chosen under the guidance of a member of the Mathematics Department.

## MINOR IN MATHEMATICS FOR ELEMENTARY EDUCATION (6 COURSES)

## Required courses:

MATH 110 Mathematics for Elementary Educators I
MATH 120 Mathematics for Elementary Educators II
MATH 206 Discrete Mathematics I
Choose three (3) courses from the following, at least one (1) at the 300-level:
MATH 219 Calculus I
MATH 220 Calculus II
MATH 226 Linear Algebra and Applications
MATH 310 Number Theory
MATH 317 Higher Geometry
MATH 322 History of Mathematics
STAT 117 Introduction to Statistics or STAT 157 Probability and Statistics

## MINOR IN STATISTICS (5 COURSES)

## Required courses:

Choose one (1) course from the following:
ENVS 202 Data Analysis for Scientists
QUAN 202 Statistical Analysis for Business and Economics
STAT 107 Business Statistics
STAT 117 Introduction to Statistics
STAT 157 Probability and Statistics
STAT 203 Statistics for the Natural Sciences
Choose two (2) courses from the following:
STAT 307 Intermediate Statistics
STAT 308 Applied Statistical Data Processing
Choose two (2) courses from the following:
MATH 340 Probability Theory
MRKT 310 Marketing Research
MRKT 410 Advanced Marketing Research
PSYC 291 Psychology Research I: Descriptive and Correlational Methods
PSYC 391 Psychology Research II: Quasi-Experimental and Experimental Methods
QUAN 470 Applied Econometrics for Economics and Business
STAT 341 Mathematical Statistics I
STAT 342 Mathematical Statistics II
Any Departmental Approved Internship (must be approved by both home department and the Mathematics Department).

Note: No more than two courses from a students' major home department may count towards both their major and this minor.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

MATH 105 Quantitative Reasoning
MATH 110 Mathematics for Elementary Educators I
MATH 120 Mathematics for Elementary Educators II
MATH 123 College Algebra
MATH 180 Precalculus
MATH 217 Business Calculus
MATH 219 Calculus I
STAT 107 Business Statistics
STAT 117 Introduction to Statistics
STAT 157 Probability and Statistics
STAT 203 Statistics for the Natural Sciences

## Domain(s)

II-A
II-A
II-A
II-A
II-A
II-A
II-A
II-A
II-A
II-A
II-A

## Nursing

## Chair: Ellen Rearick

Professor: Susan Mullaney<br>Associate Professor: Lisa J. Thomas<br>Assistant Professor: Anya A. Peters, Ellen Rearick

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The University offers a Bachelor of Science with a major in Nursing (RN-to-BS) for registered nurses who already have completed either an Associate Degree or a Diploma Program in Nursing. The baccalaureate degree program in nursing at Framingham State University is accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org)

The curriculum provides a broad educational base in the humanities and in the natural and social sciences. The program encourages self-directed learning, critical thinking, independent action, and professional awareness. The goal is preparation of a nurse who is able to function as a generalist in a variety of health-care settings. The course of study provides a base for graduate work in education, research, clinical specialization, or administration.

The curriculum is organized around the concept of prevention as a means of attaining wellness which includes:

1. Primary prevention - to prevent the initiation of illness through the reduction of risk factors and the promotion of wellness.
2. Secondary prevention - to arrest the development of illness through early detection of illness and the promotion of wellness.
3. Tertiary prevention - to minimize the consequences of illness and disability through the promotion of wellness.

## Program Outcomes:

The RN-to-BS program prepares graduates to:

- Formulate decisions about nursing practice using a foundation of evolving knowledge from Nursing, biological, and behavioral sciences and the humanities.
- Integrate ethics, integrity, and respect into patient-centered, evidence-based nursing practice.
- Apply effective written and oral communication, teamwork, and collaborative strategies to influence health-related outcomes.
- Analyze the role of health promotion and disease/injury prevention to improve the health and safety of populations.
- Demonstrate leadership skills in the oversight of, and accountability for, safe care delivery in a variety of settings.
- Employ innovations in information management and technology for the delivery of quality patient care.


## Applicants must meet the following requirements for undergraduate admissions:

1. Submit official transcripts from basic nursing programs and all colleges/universities attended.
2. Submit evidence of current unrestricted Registered Nurse licensure in Massachusetts (may apply during basic nursing program, but must be licensed prior to taking nursing courses).
3. Have an overall GPA of 2.50 or higher in pre-licensure program coursework.

## Nursing Education Transfer Compact (NETC)

For Registered Nurses who graduated from public Associate Degree in Nursing Programs in Massachusetts, the NETC includes:

- Acceptance in transfer all courses earned as part of a Board of Registration in Nursing (BORN) approved public Associate Degree in Nursing (ADN) program, without time restriction*, as a body of knowledge and practical experience that is a prerequisite to National Council Licensure Examination (NCLEX) licensure.
*Exceptions to this policy may be applied by FSU for specific courses, i.e. sciences
Transfer credit evaluations are completed by the Office of the University Registrar. Registered Nurses may receive credit for nursing and non-nursing college-level courses successfully completed at other regionally-accredited higher education institutions.


## The General Education Requirement

As per the Nursing Education Transfer Compact (NETC), nursing students who attended a Massachusetts state community college and have completed the MassTransfer Block (General Education), as indicated as such on the community college transcript, may be required to complete no more than two additional courses at FSU to satisfy FSU's Domain General Education model. A nursing student who has previously completed a bachelor's degree from a regional-accredited institution in the United States will have FSU's Domain General Education model as completed.

Students who do not meet the General Education requirements through the Mass Transfer Block (General Education) must meet the University's Domain General Education Requirements. See the Framingham State University Undergraduate Catalog for details.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Lower Division Nursing Knowledge:

## Diploma Programs

Registered Nurses who graduated from a Diploma program approved by a state Board of Registration in Nursing (BORN) will earn seven (7) transfer course-credits.

## Foreign Nursing Programs

Transcripts of Registered Nurses who graduated from foreign nursing programs will be evaluated on an individual basis. Transfer credit for previous nursing courses ( 7 course-credits/ 28 semester hours) can be earned through successful completion of the ACEII and Clinical Practice examinations.

## NURSING MAJOR (U_NU)

## UPPER DIVISION NURSING MAJOR (UNUR)

The upper division Nursing major may be completed in as few as two (2) semesters or as many needed without time limitation:

NURS 310 Professional Nursing Perspectives
NURS 325 Nursing Informatics
NURS 330 Primary Prevention in the Community
NURS 420 Nursing Theory
NURS 430 Secondary Prevention
NURS 440 Introduction to Nursing Research
NURS 460 Nursing Leadership
NURS 470 Tertiary Prevention
NOTE: As mandated by the Massachusetts General Laws 444 of the Acts of 1996, a criminal offender record information (CORI) check will be performed on students who will have clinical experience in community and home settings.

## Performance Standards

1. A GPA of 2.00 in nursing courses is required for continuance in the program.
2. A grade of at least $\mathrm{C}-(1.70)$ is required in nursing courses.
3. When a grade of $\mathrm{D}+(1.30)$ or lower is received in a nursing course the course may be repeated only once.
4. Failure to meet these standards will result in dismissal from the program.

Any student on academic probation cannot be admitted to:
NURS 440 Introduction to Nursing Research
NURS 460 Nursing Leadership
NURS 470 Tertiary Prevention.

# Nutrition and Health Studies 

## Chair: Ann Johnson

Professors: Michael Crosier, Andrea Gorman, Ann Johnson, Susan Massad, Jerusha Nelson-Peterman<br>Associate Professors: Brian J. Souza<br>Assistant Professors: Jocelyn M. Faraj, Megan Mayer*, Catherine A. Wickham

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

The Department of Nutrition and Health Studies offers a Bachelor of Science (B.S.) with majors in Health \& Wellness and Food \& Nutrition. Students may also be eligible for the $4+1$ B.S./M.S. program majoring in Food and Nutrition with a concentration in Coordinated Program in Dietetics, or the 4+1 B.S./M.Ed. majoring in Food and Nutrition with a concentration in Nutrition \& Dietetics Education.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-B (Natural Sciences) and laboratory requirement are satisfied through the completion of the major requirements.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## HEALTH AND WELLNESS MAJOR (U_HW)

## Health and Wellness Mission

The Health and Wellness program at Framingham State University provides a course of study that enables students to actively participate in the changing wellness environments. The Health and Wellness major prepares students for careers in public and community health, wellness, or fitness disciplines.

Health and Wellness Learning Goals and Specific Learning Outcomes:
Learning Goals:
The program will:

- prepare students for a variety of careers in public and community health, wellness, or fitness disciplines.
- enable students to develop proficiency in relevant technology.
- prepare students to become dedicated life-long learners.

Specific Learning Outcomes: Students will be able to:

- describe the principles of health and wellness from a multidimensional and interdisciplinary perspective.
- think and act ethically in the context of health and wellness.
- apply management principles to evaluate human, physical, and fiscal resources in organizations.
- demonstrate a variety of communication strategies in health and wellness education.
- demonstrate competence in assessing the health-related components of physical fitness.
- explain the benefits of physical activity and nutrition for health, wellness, length of life, and quality of life.


## Requirements for Major in Health and Wellness:

Major Core Courses (10 courses):
BIOL 130/130L Principles of Biology with Lab or
BIOL 142/142L Introduction to Human Biology with Lab or
An introductory biology course with lab
CHEM 103/103L Introductory Chemistry with Lab or
CHEM 107/107L Principles of Chemistry with Lab
HLTH 110 Wellness for Life
HLTH 206 Wellness Behavior
HLTH 222 Public Health and Epidemiology
HLTH 430 Research Methods in Health and Wellness
NUTR 110 Fundamentals of Nutrition Science
NUTR 262/262L Food, Culture, and Society with Lab
STAT 117 Introduction to Statistics or
STAT 157 Probability and Statistics or
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists
Capstone:
HLTH 495 Internship in Health and Wellness or
NUTR 495 Internship in Food and Nutrition

## CONCENTRATIONS

CONCENTRATION IN FITNESS (UHWF) (7 courses)
BIOL 241/241L Anatomy and Physiology I with Lab
BIOL 242/242L Anatomy and Physiology II with Lab
HLTH 302 Exercise Physiology
HLTH 310 Exercise Testing and Prescription
HLTH 410 Personal Training
NUTR 271 Nutrition for Sports and Exercise or
NUTR 333 Nutrition and Chronic Disease
One additional HLTH or NUTR course at the 200-level or above
NOTE: Students completing this concentration have met the academic requirements for a minor in biology. Suggested minors for Fitness include: American Sign Language, Chinese, Communication Arts, Biology, Business, Marketing, Nutrition, Science Communication, Spanish, Sports Management, Psychology, Sociology.

## CONCENTRATION IN PUBLIC AND COMMUNITY HEALTH (UHWP) (6 courses)

NUTR 478 Community Nutrition
Students must take five (5) courses from the following list with at least one (1) course from each of the four (4) areas:

Category 1: Health Promotion/Disease Prevention:
HLTH 326 Drugs, Alcohol, and Addictive Behavior
NEUR 225 Biopsychology
NUTR 333 Nutrition and Chronic Disease
PSYC 245 Health Psychology
SOCI 325 Health and Illness
SOCI 333 Society, Mental Health, and the Individual
SOCI 366 Death and Dying
Category 2: Global and Environmental Health:
ANTH 207 Global issues in Anthropology
GEOG 208 The Environment, Health, and Disease
GEOG 216 Introduction to Geographical Information Systems
GEOL 233 Environmental Geology
NUTR 212 Food System Sustainability
SOCI 204 Environmental Sociology
Category 3: Public Policy, Law \& Ethics:
ECON 200 The Economics of Globalization
ECON 333 Environmental Economics
ENVS 101 Introduction to Environmental Science and Policy
GEOG 235 Environmental Law and Policy
PHIL 222 Bioethics
PHIL 234 Environmental Ethics
POSC 229 Public Policy Analysis
POSC 270 Race, Politics, and the Law
POSC 325 Public Management
SOCI 230 Law and Society
SOCI 245 Race and Ethnicity
SOCI 263 Social Inequality
Category 4: Communications:
COMM 215 Science Communication
COMM 322 Persuasion and Social Influence
COMM 328 Argumentation and Advocacy
ENGL 225 Introduction to Journalism
ENGL 280 Persuasive Writing
ENGL 286 Professional Writing
ENGL 311 Writing about Science
ENGL 338 Grant Writing
ENGL 377 Writing for Online and Social Media

## FOOD AND NUTRITION MAJOR (U_FN)

## Food and Nutrition Mission

The Food and Nutrition program at Framingham State University will develop a course of study that enables graduates to actively participate in the changing food environment, in the nutrition education process, and in health care delivery systems according to the highest standards of client service and professional ethics.

- The Coordinated Program in Dietetics Concentration (UFNP) integrates an academic and supervised practice curriculum to prepare students to be entry-level dietitians. The Program meets the academic and experiential requirements which qualify students to take the Registration Examination for Dietitians upon graduation and to be a Licensed Dietitian Nutritionist in Massachusetts.
- The Nutrition and Dietetics Concentration (UFND) (Didactic Program in Dietetics) offers an academic curriculum to prepare students to be accepted in an ACEND (Accreditation Council for Education in Nutrition and Dietetics) accredited Dietetic Internship to become a registered dietitian nutritionist or into a graduate program, or to pursue a career in a food, nutrition or related field.


## Program Accreditation:

The Nutrition and Dietetics and the Coordinated Program in Dietetics concentrations are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995; 312-8990040, extension 5400. [www.eatrightpro.org/acend]

## Requirements for Major in Food and Nutrition (U_FN):

## Major core requirements (7):

NUTR 110 Fundamentals of Nutrition Science
NUTR 262/262L Food, Culture, and Society with Lab
NUTR 364/364L Experimental Study of Food with Lab
NUTR 381 Medical Nutrition Therapy I
NUTR 384 Foodservice Systems
NUTR 478 Community Nutrition
NUTR 482 Management of Food and Nutrition Services

## GENERAL DIETETIC STUDIES PRE-CONCENTRATION (UFNG)

This concentration begins preparation to become a registered dietitian through a concentration in:

## Coordinated Program in Dietetics $4+1$ (UFN4) Nutrition and Dietetics (UFND) Nutrition and Dietetics Education $4+1$ (UFNE) Nutrition and Food Service Program Management (UFNS)

All new students, both First-Year or Transfers, admitted into the Food \& Nutrition major are placed in this pre-concentration. When students are enrolled in or have completed CHEM 300 Principles of Biochemistry, they must apply to either the Nutrition and Dietetics or Coordinated Program in Dietetics concentration.

## Pre-Concentration Requirements ( 6 courses): <br> BIOL 130/130L Principles of Biology with Lab <br> BIOL 235/235L Principles of Human Physiology with Lab or <br> BIOL 241/241L Anatomy and Physiology I with Lab and <br> BIOL 242/242L Anatomy and Physiology II with Lab

CHEM 107/107L Principles of Chemistry with Lab<br>CHEM 108/108L Principles of Chemistry and Quantitative Analysis with Lab<br>CHEM 207/207L Organic Chemistry I with Lab<br>CHEM 300/300L Principles of Biochemistry with Lab

## CONCENTRATIONS

## COORDINATED PROGRAM IN DIETETICS 4+1 (UFN4)

The Coordinated Program in Dietetics (CPD) $4+1$ program includes both the academic requirements and the supervised practice requirements which qualify students to take the Registration Examination for Dietitians upon graduation with the Master of Science degree. Admission to the CPD is competitive. Twenty-four (24) undergraduate and graduate students are admitted to this program each year.

Applications are accepted only in the spring semester; applicants must be enrolled in or have completed CHEM 300 Principles of Biochemistry. Minimally, second semester junior standing is required, but applications are also accepted from seniors. Transfer students must be matriculated at the University before applying for the concentration. An application form can be found on the departmental website.

In order to complete undergraduate and graduate requirements within five years, students will need to enroll in two graduate courses, including NUTR 827 Nutrition in the School Environment ( 0.5 course credit) in the summer prior to the start of their fifth year. Continuing Education course tuition/fees apply for courses taken during the Summer Session and fifth year.

Completion of both the supervised practicum coursework and the master's degree are required in order to receive the Verification Form permitting the writing of the Examination for Registered Dietitians as of January 1, 2024.

4+1 Coordinated Program in Dietetics Concentration Requirements (10 courses):
These courses are in addition to the major core requirements ( 9 courses) and preconcentration requirements ( 5 courses).

BIOL 228/228L Microbiology with Lab
NUTR 002 Orientation to Dietetics (non-credit)
NUTR 374 Human Nutrition Science
NUTR 481 Medical Nutrition Therapy II
NUTR 481L Medical Nutrition Therapy II Clinical Practice (non-credit)
PSYC 101 General Psychology or
SOCI 101 Introduction to Sociology or
ANTH 161 Cultural Anthropology
STAT 117 Introduction to Statistics or
STAT 203 Statistics for the Natural Sciences or
ENVS 202 Data Analysis for Scientists

## Required graduate courses ( 3 courses in the undergraduate senior year, which will appear as transfer coursework):

NUTR 903 Advanced Nutrition and Metabolism
NUTR 911 Research in Nutrition and Education
Choose one (1) graduate elective course from the following:
CPSY 911 Orientation to Counseling Practice
Any NUTR 900-level course
Any NUED 900-level course with the exception of NUED 914 Contemporary Nutrition Issues in Schools or NUED 910 Nutrition Science in the Classroom

## NUTRITION AND DIETETICS (UFND)

Students are prepared to meet the requirements of the Didactic Program in Dietetics (DPD). Students in this concentration intend to apply for admission to an Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited supervised practice program upon graduation. Twenty-four (24) students are accepted to this concentration each year. Admission to the DPD is competitive. Minimally, second semester sophomore standing is required, but applications are accepted from juniors and seniors.

- Students apply to this concentration while they are enrolled in or after completing CHEM 300 Principles of Biochemistry. In addition, transfer students must complete one (1) semester at the University before being accepted into this concentration.
- Students who are not accepted into the Nutrition and Dietetics Concentration or the Coordinated Program in Dietetics Concentration must choose another different concentration under Food \& Nutrition or a different major offered at the University.
- Minimal requirements include maintaining a GPA of 2.70 for the Nutrition and Dietetics Concentration and a GPA of 2.50 in science courses, as well as earning a minimum grade of C- (1.7) in all Biology, Chemistry, and Food \& Nutrition courses. An application form can be found on the departmental website.
- During the fall semester of their senior year, students work with the DPD Director to apply to a post-baccalaureate ACEND-accredited supervised practice program by registering for NUTR 400 Preparation for Dietetic Internship.
- Students are eligible to take the Registration Examination for Dietetic Technicians upon graduation.


## Concentration Requirements (7 courses):

These courses are in addition to the major core requirements (9 courses) and pre-concentration requirements (6 courses).

BIOL 228/228L Microbiology with Lab
NUTR 374 Human Nutrition Science
NUTR 400 Preparation for Dietetic Internship (non-credit)
NUTR 481 Medical Nutrition Therapy II
One additional HLTH or NUTR course at or above the 200-level
PSYC 101 General Psychology or
SOCI 101 Introduction to Sociology or
ANTH 161 Cultural Anthropology
STAT 117 Introduction to Statistics or
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists
NOTE: Students completing this concentration have met the academic requirements to sit for the Massachusetts licensure exam to be a licensed nutritionist dietitian (LDN). See http://www.mass.gov/ocabr/licensee/dplboards/nu/.

## NUTRITION AND DIETETICS EDUCATION 4+1 (UFNE)

Students are prepared to meet the requirements of the Didactic Program in Dietetics (DPD), a program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). Effective January 1, 2024, the Commission on Dietetic Registration (CDR) will require a minimum of a master's degree to be eligible to take the credentialing exam to become a registered dietitian nutritionist (RDN). In addition, CDR requires that individuals complete coursework and supervised practice in program(s) accredited by ACEND.

Students who complete this Nutrition and Dietetics Education concentration will receive a verification statement attesting that they have met the ACEND coursework requirement. The concentration also allows students to begin master's-level studies during their senior year, as part of both their undergraduate and master's degree requirements for the Master of Education concentration in Nutrition Education program (M.Ed.). After successful completion of the undergraduate Food and Nutrition concentration in Nutrition and Dietetics Education, students complete the remaining coursework and written exam for the Master of Education concentration in Nutrition Education through the Department of Graduate and Continuing Education. Upon completion of the M.Ed. component of this $4+1$ program, students will receive a verification statement attesting that they have met the ACEND master's degree requirement. Students may apply for an accredited external supervised practice experience during or after their senior year in the undergraduate portion of the $4+1$ program. In addition to both the undergraduate and M.Ed. components of this $4+1$ program, students must complete an ACEND-accredited supervised practice experience to be eligible to take the credentialing exam to become a registered dietitian nutritionist.

- Students must have at a minimum second semester junior standing to apply to this concentration.
- Students apply to this concentration while they are enrolled in or after completing CHEM 300 Principles of Biochemistry. In addition, transfer students must complete one (1) semester at the University before being accepted into this concentration.
- Minimal requirements for the Nutrition and Dietetics Education Concentration include a GPA of 2.70, a GPA of 2.50 in science courses, and a minimum grade of C- (1.7) in any Biology, Chemistry, and Food \& Nutrition course. An application form can be found on the departmental website.
- During the fall semester of their senior year, students work with the DPD Director to apply to a post-baccalaureate ACEND-accredited supervised practice program by registering for NUTR 400 Preparation for Dietetic Internship (no course credit).
- Students are eligible to take the Registration Examination for Dietetic Technicians upon graduation.

Application is a stepwise process:

| Student Status | When Apply | Application |
| :--- | :--- | :--- |
| Minimum second semester <br> sophomore year | Semester <br> completing <br> CHEM 300 | Nutrition and Dietetics concentration |
| Minimum second semester <br> junior year | Spring semester | Nutrition and Dietetics Education <br> concentration <br> and <br> Master of Education (MEd) degree <br> with <br> concentration in Nutrition Education |

Application forms for the M.Ed. concentration in Nutrition Education can be found on both the department's website and on the graduate admissions website.

Nutrition and Dietetics Education $4+1$ Concentration Requirements ( 8 courses):
These courses are in addition to the major core requirements (9 courses)
BIOL 228/228L Microbiology with Lab
NUTR 374 Human Nutrition Science
NUTR 400 Preparation for Dietetic Internship (non-credit)
NUTR 481 Medical Nutrition Therapy II
NUTR 495 Internship in Food and Nutrition
PSYC 101 General Psychology or
SOCI 101 Introduction to Sociology or
ANTH 161 Cultural Anthropology
STAT 117 Introduction to Statistics or
STAT 208 Biostatistics or
ENVS 202 Data Analysis for Scientists

# Required graduate courses ( 3 courses in the undergraduate senior year, which will appear as transfer coursework): 

NUED 914 Contemporary Nutrition Issues for Educators
NUED 970 Technology in Nutrition Education
EDIL 920 Learning and Human Development

## CONCENTRATION IN NUTRITION AND FOOD SERVICE PROGRAM MANAGEMENT (UFNS) (9 courses)

The Nutrition and Food Service Program Management Concentration offers an academic curriculum to prepare students for careers in the field of food and nutrition that do not require a Registered Dietitian Certification. This interdisciplinary concentration includes a strong foundation in nutrition and nutrition science and offers opportunities to build vital management skills which can be used in a variety of nutrition and food-related work environments including nutrition and food education, foodservice management, school nutrition, and community program management.

## Concentration Requirements ( 9 courses):

ACCT 220 Introduction to Financial Accounting
BIOL 142/142L Introduction to Human Biology with Lab or
BIOL 235/235L Principles of Human Physiology with Lab
CHEM 103/103L Introductory Chemistry with Lab or
CHEM 107/107L Principles of Chemistry with Lab
CHEM 201/201L Introductory Organic Chemistry and Biochemistry with Lab or
CHEM 207/207L Organic Chemistry I with Lab
HLTH 222 Public Health and Epidemiology
MGMT 280 Organizational Behavior or
ENTR 301 Cultivating and Managing Innovation
MRKT 181 Marketing Principles
NUTR 495 Internship in Food and Nutrition
Choose one (1) elective course from the following:
COMM 215 Science Communication
COMM 226 Writing for Visual Media
COMM 303 Organizational Communication
COMM 234 Intercultural Communication
ENGL 286 Professional Writing
ENGL 311 Writing about Science
ENGL 338 Grant Writing
ENGL 371 Business Writing

## MINORS

## MINOR IN HEALTH AND WELLNESS (6 COURSES)

## Students complete the following six (6) required courses:

BIOL 142 Introduction to Human Biology or BIOL 235 Principles of Human Physiology or BIOL 241 Human Anatomy and Physiology I

HLTH 110 Wellness for Life
HLTH 206 Wellness Behavior
HLTH 326 Drugs, Alcohol, and Addictive Behavior
NUTR 110 Fundamentals of Nutrition Science
Choose one (1) additional elective course from:
BIOL 242 Human Anatomy and Physiology II
HLTH $\qquad$ Health and Wellness course

NUTR $\qquad$ Food and Nutrition

PSYC 245 Health Psychology
NUTR 333 Nutrition and Chronic Disease

## MINOR IN NUTRITION (6 COURSES)

## Students complete the following six (6) required courses: <br> CHEM 103 Introductory Chemistry or <br> CHEM 107 Principles of Chemistry <br> CHEM 201 Introductory Organic Chemistry and Biochemistry <br> NUTR 110 Fundamentals of Nutrition Science <br> NUTR 262/262L Food, Culture, and Society with Lab <br> NUTR 333 Nutrition and Chronic Disease <br> NUTR 364/364L Experimental Study of Food

## MINOR IN PUBLIC HEALTH (5 COURSES)

To earn a minor in Public Health, students must apply in writing to the chair of the Food and Nutrition Department. To complete the minor, no more than two (2) required courses from major requirements may count towards minor. Courses in the minor may be used to fulfill general education requirements. To complete the course residency requirement for a minor, a minimum of three (3) course-credits ( 12 semester hours) in the minor must be taken at Framingham State University.
Please see the Interdisciplinary section of the catalog for course requirements.

| COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.) |  |
| :--- | ---: |
| Course | Domain |
| HLTH 110 Wellness for Life | III-B |
| HLTH 140 Introduction to Exercise Science | II-B |
| NUTR 110 Fundamentals of Nutrition Science | III-C |
| NUTR 212 Food System Sustainability | II-B |
| RAMS 101HW First Year Seminar: Health and Wellness Perspectives | III-A |

# Political Science, Law, and Global Studies 

Chair: Joseph Coelho

Associate Professor: Joseph Coelho, Christopher P. Latimer, David Smailes

Assistant Professor: Carol J. Gray

Pre-Law Advisor: David Smailes
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirements

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of the Global Studies major or through the completion of the Political Science major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## POLITICAL SCIENCE MAJOR (U_PO)

## Departmental Requirements for Major in Political Science:

The Political Science major consists of eleven (11) courses.

## Major Core Requirements:

POSC 110 Introduction to American Politics
POSC 120 Introduction to World Politics
POSC 211 Political Theory: Justice, Law, and Order
POSC 246 Comparative Politics
POSC 305 Research Methods in Political Science

## Required Capstone:

POSC 425 Seminar in Political Science
Recommended course:
STAT 117 Introduction to Statistics or
STAT 157 Probability and Statistics

## POLITICAL SCIENCE CONCENTRATIONS

All Political Science majors need to select a concentration from the three (3) listed as follows:

## INTERNATIONAL POLITICS (UPOI)

The International Politics Concentration provides students the opportunity to focus their studies on international affairs. Students acquire knowledge about the way that states and non-state actors interact with one another on the international stage, and the research skills necessary to engage in the study of international politics. Students examine the prominence of both security and nonsecurity issues, including those generated and governed by states, along with those created by intergovernmental organizations, non-governmental organizations, and private actors.

## Concentration Requirements (5)

Choose five (5) elective courses, at least two (2) of which must be at the 300 -level or above:
ECON 200 The Economics of Globalization
ENVS 272 Global Environmental Issues
POSC 200 Model United Nations
POSC 216 Film and Politics
POSC 220 The Politics of Globalization
POSC 248 The Global Rise of Populism
POSC 269 Building Peace After Conflict
POSC 308 International Law, Politics, and Society
POSC 342 Formation and Conduct of United States Foreign Policy
POSC 360 Threats to International Security in the 21st Century
POSC 365 Latin American Politics
POSC 490 Independent Study in Political Science
SOCI 254 Social Conflict in Northern Ireland and Ireland
SOCI 288 Immigration in the United States

## POLITICAL SCIENCE GENERAL STUDIES (UPOG)

## Concentration Requirements (5)

## Intermediate Courses (select three):

POSC 200 Model United Nations
POSC 209 The American Supreme Court
POSC 213 Political Parties and Interest Groups
POSC 216 Film and Politics
POSC 218 The American Presidency and Congress
POSC 220 The Politics of Globalization
POSC 223 Bureaucratic Politics and Power
POSC 229 Public Policy Analysis
POSC 248 The Global Rise of Populism
POSC 250 American Legal Systems
POSC 269 Building Peace After Conflict
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
NOTE: Students should complete POSC 110 Introduction to American Politics and POSC 120 Introduction to World Politics during their freshman year. All above courses must be completed prior to the end of the sophomore year.

## Advanced courses - select two (2):

POSC 300 Moot Court Symposium
POSC 308 International Law, Politics, and Society
POSC 313 American Political Thought
POSC 315 Judicial Politics and Policy
POSC 316 United States Constitutional Law: Civil Liberties
POSC 325 Public Management
POSC 327 Elections and Campaign Strategy
POSC 342 Formation and Conduct of United States Foreign Policy
POSC 360 Threats to International Security in the 21st Century
POSC 363 The Politics of Race and Ethnicity in the United States
POSC 365 Latin American Politics
POSC 490 Independent Study in Political Science
POSC 495 Internship in Political Science

## PRE-LAW (UPOE)

## Concentration Requirements (5)

Choose (5) elective courses, at least two (2) of which must be at the 300-level or above:

CRIM 201 White Collar Crime
CRIM 240 Drugs, Social Control, and the Law
CRIM 313 The Culture of Punishment
EOG 235 Environmental Law and Policy
HSTY 313 Civil Rights Movement in the United States
POSC 206 Constitutional Law: Powers of the Government
POSC 209 The American Supreme Court
POSC 211 Political Theory: Justice, Law, and Order
POSC 250 American Legal Systems
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
POSC 276 Technology, Politics, and the Law
POSC 300 Moot Court Symposium
POSC 308 International Law, Politics, and Society
POSC 315 Judicial Politics and Policy
POSC 316 United States Constitutional Law: Civil Liberties
SOCI 230 Law and Society

## Bachelor of Arts with a major in Political Science or Minor in Public Administration/Master of Public Administration with a concentration in Public Administration (B/MPA)

This $4+1$ program provides students the opportunity to complete course work at the undergraduate and graduate level that will prepare them for a career in the public sector, including work in government and non-profit organizations, positions in the private sector who are involved with and affected by governmental activities, and careers in government at the management level. In this period of increased interdependency among the public, non-profit, and private sectors, the program is dedicated to the increased responsibilities and challenges confronting the public manager.

Applications are to be submitted at the start of the junior year through the Office of Graduate Admissions. Students must have Junior Status with an overall GPA of 3.00. Completion of an undergraduate statistics course is also required. Transfer students must be matriculated at the University before applying for this program.

## 4+1 Program Requirements (14 courses):

These courses are in addition to the major core requirements (8 courses).
POSC 223 Bureaucratic Politics and Policy
POSC 229 Public Policy Analysis
POSC 325 Public Management
POSC 335 Public Personnel Management

## Required graduate courses ( 2 courses in the undergraduate senior year, which will appear as transfer coursework):

PADM 901 Foundations of Public Administration (Fall semester)
Choose one (1) graduate elective course from the following:
MGMT 904 Management and Leadership
PADM 929 Techniques of Policy Analysis
PADM 937 Techniques of Public Budgeting and Resource Management
QUAN 908 Quantitative Analysis for Administrators

## GLOBAL STUDIES MAJOR (U_GS)

Students learn the historical causes and current process of globalization from an interdisciplinary foundation. They are given the tools to understand global relationships and learn about ways to introduce effective change in issues of global importance. The global studies major emphasizes a flexible structure, allowing students to share in the design of their major and to respond to emergent opportunities at the University and abroad. Experiential learning is stressed: students must study abroad for one semester and are encouraged to take internships and other service learning opportunities.

## Requirements for Major in Global Studies (UGSG)

## Three (3) core Global Studies courses:

The core courses must be taken at Framingham State University.
GLST 101 Introduction to Global Studies
GLST 201 Research Methods: Case Studies in Globalization
GLST 401 Global Studies Seminar
Three (3) of the following seven (7) interdisciplinary elective courses:
ANTH 207 Global Issues in Anthropology
ECON 200 Economics of Globalization
ENGL 203 Contemporary Global Literature
HSTY 102 The Comparative History of World Civilizations
POSC 220 The Politics of Globalization
SOCI 357 Sociological Perspectives on Globalization

## Required international experience component (4):

Students must take at least one (1) semester of study abroad and strongly recommended to be taken during junior year. The study abroad experience should align with the student's area of focus. Classes taken abroad can count as interdisciplinary electives or restricted electives with the program director's approval. Under exceptional circumstances, to be determined by the Program Coordinator, a student may opt to conduct an intensive internship program abroad or within the United States at an appropriate organization.

## Language related requirement (2):

At least two (2) 200-level or above language classes. This requirement is waived if the student completes a minor in Chinese, French, or Spanish.

## Restricted electives (4):

Students design their own area of focus upon acceptance into the major in consultation with the Program Chair who must approve all course selections. Students take four (4) courses from the following list of approved courses for the major. At least two (2) courses must be at the 300 -level or above. The courses are grouped into suggested areas organized around themes or regions. Students are encouraged to combine thematic and regional areas.

## Suggested Areas of Focus:

Students majoring in Global Studies may elect to follow an area of focus within the major. An area of focus is not the same as a concentration and will not be noted on a student's transcript or audit. A cohesive sequence of courses in a subfield of the discipline enables students to strengthen their knowledge for employment opportunities upon graduation and/or advanced post-graduate training. Students interested in pursuing an area of focus are encouraged to choose their major electives from the courses listed below:

## Thematic focus

## Global Identities

ANTH 243 Native American Cultures
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
ANTH 360 Language and Culture
ARTH 285 The Art of Asia
ENGL 234 Global Cinema
ENGL 277 Gender in Contemporary Global Literature
ENGL 326 The Novel and the World
ENGL 361 Postcolonial Literature
ENGL 398 Studies in World Literature after 1900
GEOG 211 Cultural geography
HSTY 303 Native American History, 1500-1800
HSTY 321 European and American Muslims: A History
HSTY 359 Slavery and Abolition
PSYC 259 Cultural Psychology
SOCI 245 Race and Ethnicity
Global Development, Environment, and Sustainability
ANTH 253 Gender Across Cultures
BIOL 103 Biological Perspectives on Environmental Issues
BIOL 200 Introduction to Environmental Science
BIOL 203 Plants and Society
ECON 333 Environmental Economics

ENVS 101 Introduction to Environmental Science and Policy
GEOG 135 Introduction to Environmental Studies
GEOG 201 Economic Geography
GEOG 206 Political Geography
GEOG 212 Geographic Perspectives on the Global Environment
GEOG 235 Environmental Law and Policy
PHIL 234 Environmental Ethics

## Globalization, Justice, and Human Rights

CRIM 222 Global Criminology
GEOG 180 Native Americans: The Original Injustice on American Soil
PHIL 102 Introduction to Ethics: Why Be Moral?
PHIL 222 Bioethics
POSC 120 Introduction to World Politics
POSC 200 Model United Nations
POSC 211 Political Theory: Justice, Law, and Order
POSC 269 Building Peace After Conflict
SOCI 230 Law and Society
International Political Economy
ECON 101 Principles of Macroeconomics
ECON 333 Environmental Economics
ECON 410 International Trade
ECON 414 International Finance
GEOG 201 Economic Geography
GEOG 206 Political Geography
HSTY 345 Networks and Empires: Economic History of the Atlantic World
MRKT 318 International Marketing
NUTR 262/262L Food, Culture, and Society with Lab
POSC 120 Introduction to World Politics
POSC 260 Comparative Political Systems

## Regional focus

## China

CHIN 118 Chinese Writing System and Calligraphy
GEOG 254 Geography of Monsoon Asia
HSTY 149 Twentieth Century China
Latin America/Hispanic Studies
ANTH 313 South American Archaeology
HSTY 337 Caribbean History
SPAN 333 Iberian Culture and Civilization
SPAN 334 Latin American Culture and Civilization
POSC 365 Latin American Politics

## Europe and Russia

GEOG 252 Geography of Europe
GEOG 258 Geography of the British Isles
HSTY 349 The "Sixties" in the United State and Europe

HSTY 369 History of the Crusades
HSTY 381 Remaking Europe: History, Politics, \& Culture since World War II
HSTY 388 Peter to Putin: The History of Modern Russia
Africa and the Middle East
GEOG 255 Geography of Sub-Saharan Africa
GEOG 256 Geography of the Middle East
HSTY 134 Pharaohs, Slaves, and Cacao: Africa and the World
HSTY 352 Racism and Resistance: South Africa since 1652
HSTY 383 Making of the Modern Middle East

## Additional approved courses:

Approved study tour from any participating department.
Approved independent study from any participating department.
Approved internship from any participating department.

## MINORS

## MINOR IN LAW AND POLITICS (5 COURSES)

The minor in Law and Politics is designed to provide undergraduate students with a structured program of study in judicial and governmental processes. U.S. public policy is constrained by our legal system, and conversely, our legal system is sometimes modified by political interests. This minor focuses on the interaction of law and politics.

POSC 110 Introduction to American Politics
Plus four (4) courses from the following:
POSC 211 Political Theory: Justice, Law, and Order
POSC 206 Constitutional Law: Powers of the Government
POSC 250 American Legal Systems
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
POSC 300 Moot Court Symposium
POSC 315 Judicial Politics and Policy
POSC 316 United States Constitutional Law: Civil Liberties
POSC 450 Internship in the Judicial System

## MINOR IN POLITICAL SCIENCE (5 COURSES)

POSC 110 Introduction to American Politics
POSC 120 Introduction to World Politics
Three (3) other courses above the 100-level acceptable for the major, at least one of which must be at the 300 -level or above.

## MINOR IN PUBLIC ADMINISTRATION (5 COURSES)

The Public Administration minor addresses the purpose, function and behavior of public sector agencies and the management of government and non-profit organizations. It addresses the environment in which public administration operates and provides students with the tools and techniques public sector mangers employ to develop, promote, implement, and assess public policy and programs.

POSC 110 Introduction to American Politics
POSC 223 Bureaucratic Politics and Policy
POSC 229 Public Policy Analysis
POSC 325 Public Management
POSC 335 Public Personnel Management

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

GLST 101 Introduction to Global Studies
POSC 110 Introduction to American Politics
POSC 120 Introduction to World Politics
POSC 200 Model United Nations
POSC 206 Constitutional Law: Powers of the Government
POSC 209 The American Supreme Court
POSC 211 Political Theory: Justice, Law, and Order
POSC 213 Political Parties and Interest Groups
POSC 216 Film and Politics
POSC 218 The American Presidency and Congress
POSC 220 The Politics of Globalization
POSC 223 Bureaucratic Politics and Power
POSC 229 Public Policy Analysis
POSC 246 Comparative Politics
POSC 250 American Legal Systems
POSC 269 Building Peace After Conflict
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
RAMS 101PO First-Year Seminar: Political Perspectives

## Domain(s)

III-C
III-B
III-C
III-B
III-A
III-A
III-A
III-B
III-C
III-B
III-C
III-A
III-B
III-C
III-B
III-C
III-A
III-A
III-B

# Psychology and Philosophy 

Chair: Nicole Rossi

Professors: Paul W. Bruno, Robert L. Donohue, Anna Flanagan, Deborah A. McMakin, Cynthia A. Prehar, Nicole Rossi**, Dawn L. Vreven*<br>Associate Professors: Joseph E. D'Andrea, Mirari Elcoro, Paul M. Galvin, Phoebe (Jen) S. Lin, Margaret C. Obaid, Charles Sachs<br>Assistant Professors: Michael Greenstein, Kimberly Arditte Hall

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain III-B (Perspectives on the Contemporary World) requirement is satisfied through the completion of the Psychology major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. PSYC 101 General Psychology or PSYC 200 Psychology of Development is a prerequisite for all other psychology courses except where otherwise noted. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Minimum Grade Requirements

The Psychology Department requires that all Psychology majors achieve a minimum grade of C(1.70) in PSYC 101 General Psychology as well as a minimum grade of C- (1.70) in the mathematics requirement before enrolling in PSYC 291 Research I: Descriptive and Correlational Methods. These courses provide the essential foundation for subsequent psychology courses, and a basic grasp of the concepts introduced in these courses is critical. Finally, a minimum grade of C(1.70) is required in each of the two (2) capstone courses that the student.

## Writing Intensive Requirement for 300-Level Psychology Courses

Writing intensive courses involve writing paper(s) that require application and/or integration of the course's content. Such writing should follow elements of APA style (e.g. page format, citation style, referencing). At a minimum, the course will include one of the following based on instructor discretion.

1. A single multi-page paper that includes multiple iterations with instructor feedback;
2. Two or more multi-page papers;
3. A paper with a minimum of five-pages.

## PSYCHOLOGY MAJOR (U_PS)

Departmental Requirements for Major:

## Core Department Courses (5):

PSYC 101 General Psychology
PSYC 291 Research I: Descriptive and Correlational Methods
PSYC 391 Research II: Quasi-Experimental and Experimental Methods

Two (2) of the following four (4) 400-level Capstone courses:
PSYC 450 Empirical Research Thesis in Psychology
PSYC 460 History and Systems in Psychology
PSYC 480 Psychology Seminar
PSYC 495 Internship in Psychology
Major-related core courses (2):
PHIL 102 Introduction to Ethics: Why Be Moral? or
PHIL105 Introduction to Political and Social Philosophy or
PHIL 118 Introduction to the Philosophy of Science
STAT 117 Introduction to Statistics or
STAA 127 Statistics for Social Sciences

## CONCENTRATION IN GENERAL PSYCHOLOGY (UPSG)

## Eight (8) Psychology Courses:

## Domain Courses (5):

All Psychology majors are required to complete one (1) course in each of the following five (5) domains of psychological knowledge:

## Biological Domain

One (1) of the following:
NEUR 225 Biopsychology
PSYC 245 Health Psychology
PSYC 280 Sensation and Perception

## Clinical and Counseling Domain

One (1) of the following:
PSYC 217 Introduction to Counseling
PSYC 222 Psychopathology

## Developmental Domain

## One (1) of the following:

PSYC 201 Child Development
PSYC 212 Adolescent Psychology
PSYC 231 Adult Development

## Learning and Cognition Domain

One (1) of the following:
PSYC 236 Psychology of Learning
PSYC 263 Cognitive Psychology
PSYC 271 Applied Behavior Analysis

## Sociocultural Domain

## One (1) of the following:

PSYC 224 Social Psychology
PSYC 259 Cultural Psychology
PSYC 286 Psychology of Women

## Choose Three (3) Upper-Level Electives:

All majors will complete three (3) additional upper-level courses from Psychology courses at the $300-\mathrm{and} /$ or $400-\mathrm{level}$ or from Neuroscience at the $300-\mathrm{level}$. The choice of upper-level courses is up to the student. It is recommended that students consult with their advisors in the selection of upper-level course options.

## MINORS

## MINOR IN PSYCHOLOGY (5 COURSES)

The following courses are required to complete this minor:

> PSYC 101 General Psychology
> Four (4) additional Psychology courses which may include the RAMS 101PS First-Year Seminar: Psychological Perspectives. In addition, the neuroscience courses of NEUR 225 Biopsychology, NEUR 348 Cognitive Neuropsychology, NEUR 380 Neuropharmacology, or NEUR 450 Seminar in Neuroscience may also count toward a minor in psychology. However, students that minor in BOTH Psychology AND Neuroscience may only apply ONE course in common beyond PSYC 101 General Psychology to fulfill the minor requirements.

## MINOR IN PHILOSOPHY (5 COURSES)

The following courses are required to complete this minor:
PHIL 103 Introduction to Logic
Four (4) additional philosophy courses, two (2) of which must be at the 200 -level or above.

## MINOR IN NEUROSCIENCE (5 COURSES)

Neuroscience is the study of the nervous system, the cells and tissues of which it consists; the thoughts, emotions and behaviors that it manifests and the way it changes due to stimuli from both inside and outside the body. It is an interdisciplinary science that combines aspects of Biology, Psychology, Philosophy, and Chemistry. Neuroscientists examine the development, structure and function of the nervous system, what happens in disease states and mental illness and how different compounds can alter its activity.
Please see the Interdisciplinary section of the catalog for course requirements.

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Courses

PHIL 101 Invitation to Philosophy
PHIL 102 Introduction to Ethics: Why be Moral?
PHIL 103 Introduction to Logic
PHIL 105 Introduction to Political and Social Philosophy
PHIL 118 Introduction to Philosophy of Science
PHIL 131 Critical Reasoning
PHIL 201 History of Ancient Philosophy
PHIL 222 Bioethics
PSYC 101 General Psychology
PSYC 200 Psychology of Development
RAMS 102PH First-Year Seminar: Philosophy
STAA 127 Statistics for Social Sciences

## Domain(s)

I-B
III-C
II-A
III-B
I-B
II-A
III-A
III-C
III-B
III-B
I-B
II-A

# Sociology and Criminology 

Chair: Vincent Ferraro

Professors: Benjamin Alberti, Xavier Guadalupe-Diaz, Jonathan Martin, Ira Silver<br>Associate Professors: Kaan Agartan**, Vincent Ferraro, Forrest Rodgers**, Patricia Sánchez-Connally<br>Assistant Professors: Zeynep Gönen, James McQuaid, Elizabeth Whalley

*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain II-A (Analysis, Modeling, and Problem Solving) requirement is satisfied through the completion of the Criminology or Sociology major. The General Education Domain III-C (Global Competency, Ethical Reasoning, and/or Human Diversity) requirement is satisfied through the completion of the Anthropology major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## CRIMINOLOGY MAJOR (U_CR)

The Criminology major is an interdisciplinary baccalaureate program grounded in a strong liberal arts curriculum. This program introduces students to three important dimensions of criminology: 1) the role of law and legal systems; 2) social/structural dimensions of crime; 3) individual/behavioral dimensions of crime. While this program will undoubtedly attract students interested in criminal justice careers, it is intended to offer students access to a broader array of career opportunities than that provided by training in Criminal Justice. Students studying criminology at Framingham State University will learn to approach the issue of crime in society from a theoretically informed and research-based perspective in a program that places great emphasis on the underlying causes of crime and on the role of policy-making and policy implementation in crime prevention and crime control.

## Departmental Requirements for the Criminology major

## Six (6) core courses:

CRIM 121 Sociological Perspectives on Criminology
CRIM 301 Criminological Theory
CRIM 302 Quantitative Methods I - Research Design
CRIM 303 Quantitative Methods II - Data Collection \& Analysis
SOCI 320 Qualitative Methods - Uncovering Meaning in the Social World
Capstone:
CRIM 480 Criminology Senior Thesis Seminar or CRIM 495 Internship in Criminology or POSC 450 Internship in the Judicial System

## Recommended Course:

PSYC 101 General Psychology

## CONCENTRATION IN GENERAL CRIMINOLOGY (UCRG)

## Concentration core requirements (6 courses):

Students must select six (6) elective courses, at least three (3) of which must be CRIMdesignated and at least two (2) must be at the 300 -level or above.

## Choose six (6) from the following:

ANTH 206 Forensic Anthropology
ANTH 258 Critical Approaches to Men and Masculinities
CRIM 120 The Fight for Social Justice: Institutional Battlegrounds
CRIM 201 White Collar Crime
CRIM 211 Crime and Inequality
CRIM 218 Crime Mapping
CRIM 222 Global Criminology
CRIM 224 Juvenile Delinquency
CRIM 233 Victimization and Justice
CRIM 240 Drugs, Social Control, and the Law
CRIM 270 Social Deviance
CRIM 308 Understanding Violence
CRIM 313 The Culture of Punishment
CRIM 321 Intimate Partner Violence
CRIM 330 Policing and Society
CRIM 336 Sexual Violence
CRIM 360 Media and Crime
HSTY 186 History of Modern Violence
HLTH 326 Drugs, Alcohol, and Addictive Behavior
MGMT 215 Legal Environment of Business
NEUR 225 Biopsychology
PHIL 102 Introduction to Ethics: Why be Moral?
POSC 206 Constitutional Law: Powers of the Government
POSC 209 The American Supreme Court
POSC 250 American Legal Systems
POSC 270 Race, Politics, and the Law
POSC 272 Gender, Politics, and the Law
POSC 276 Technology, Politics, and the Law
POSC 315 Judicial Politics and Policy
POSC 316 United States Constitutional Law and Politics
POSC 337 Legislative Politics and Policy
PSYC 212 Adolescent Psychology
PSYC 222 Psychopathology
PSYC 271 Principles of Behavior Modification
PSYC 373 Psychology and the Law
SOCI 130 Social Problems
SOCI 203 Introduction to Critical Race Theory
SOCI 213 Social Class

SOCI 230 Law and Society
SOCI 233 Reproductive Rights and Reproductive Justice
SOCI 237 Capitalism, Race, and Social Control
SOCI 245 Race and Ethnicity
SOCI 263 Social Inequality
SOCI 288 Immigration in the United States
SOCI 308 Political Sociology: Who Rules?
SOCI 333 Society, Mental Health, and the Individual

## SOCIOLOGY MAJOR (U_SO)

## Departmental Requirements for Major in Sociology

## Six (6) core Sociology courses:

SOCI 101 Introduction to Sociology or SOCI 130 Social Problems

SOCI 301 Sociological Theory
SOCI 302 Quantitative Methods I - Research Design
SOCI 303 Quantitative Methods II - Data Collection \& Analysis
SOCI 320 Qualitative Methods - Uncovering Meaning in the Social World
SOCI 480 Sociology Senior Thesis Seminar or
SOCI 495 Internship in Sociology or
ANTH 495 Internship in Anthropology

## Sociology majors must choose one (1) of the following two (2) concentrations:

## CONCENTRATION IN GENERAL ANTHROPOLOGY (USOA)

## Five (5) Courses:

All Sociology majors fulfilling the Concentration in Anthropology are required to complete five (5) in Anthropology, one (1) of which must be at the 300-level or above.

Recommended courses:
ANTH 161 Cultural Anthropology
ANTH 172 Interpreting the Past: Archaeological Perspectives
ANTH 206 Forensic Anthropology
ANTH 207 Global Issues in Anthropology
ANTH 243 Indigenous Cultures of North America
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
ANTH 290 Non-Western Cultural Studies Tour
ANTH 313 South American Archaeology
ANTH 360 Language and Culture

## CONCENTRATION IN GENERAL SOCIOLOGY (USOG)

## Choose five (5) Courses:

All Sociology majors fulfilling the Concentration in General Sociology are required to complete five (5) department electives (can be Anthropology, Criminology, or Sociology), two (2) of which must be at the 300 -level or above. Please see the Areas of Focus below for suggestive courses.

## Areas of Focus

Students majoring in Sociology with a Concentration in General Sociology may elect to follow an area of focus within the major. An area of focus is not the same as a concentration and will not be noted on a student's transcript or audit. A cohesive sequence of courses in a subfield of the discipline enables students to strengthen their knowledge for employment opportunities upon graduation and/or advanced post-graduate training. Students interested in pursuing an area of focus are encouraged to choose their major electives from the courses listed below:

## Area of Focus: Anthropology

Anthropology provides an understanding of culture, the various adaptive styles human beings have devised, and the ways in which they have become diversified. It is designed to prepare students for careers involving interaction and cooperation with people from diverse cultural, religious, and ethnic groups. Some examples are government; international development; foundation administration; business enterprises, especially those with overseas interests; non-profit organizations, especially non-governmental organizations (NGO's) with global interests; human ecology; and environmental consulting. In addition, this area of focus prepares students for graduate study in anthropology, sociology, and international relations.

## Recommended courses:

ANTH 161 Cultural Anthropology
ANTH 172 Interpreting the Past: Archaeological Perspectives
ANTH 206 Forensic Anthropology
ANTH 207 Global Issues in Anthropology
ANTH 243 Indigenous Cultures of North America
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
ANTH 290 Non-Western Cultural Studies Tour
ANTH 313 South American Archaeology
ANTH 360 Language and Culture
SOCI 226 Sociology of Rap and Hip Hop
SOCI 264 Black Communities and Institutions

## Area of Focus: Business and Society

This subfield is for students interested in professional and business careers. The focus is on various models of work systems in American enterprise, social regulation of business, the character of the global economy, and markets as systems of social exchange relating to families, work organizations, and the state. Fieldwork is encouraged for students through our field experience course.

[^2]```
SOCI 245 Race and Ethnicity
SOCI 264 Black Communities and Institutions
SOCI 282 Society, Technology, and the Future
SOCI 308 Political Sociology: Who Rules?
SOCI 321 Social Policy in Our Lives
SOCI 340 Sociology of Work
SOCI 342 People and Organizations
SOCI 357 Sociological Perspectives on Globalization
```


## Area of Focus: Deviance and Social Control

A focus on deviance and social control implies taking a careful look at how forms of social and personal behavior which violate mainstream norms arise, and at how mainstreamers and mainstream social institutions regard and respond to such behavior. We will be looking at behavioral styles called "crime", "delinquency", "immorality", "non-conformity", and so forth. How do such modes of behavior arise and how do they become labeled as deviant styles by the society and its mainstream enforcers? How do deviants assess their own behavior and how is it viewed by others? How does it affect their relationships with others? What do "insider- outsider" relations consist of? What does society as a whole define as order? How do various social institutions and groupings (the legal and medical establishments, and the upholders of public morality) respond to what they view to be disorder? How does society punish transgressors and enforce rules and impose sanctions? This subfield is particularly suitable for those interested in the practice of law and law enforcement, politics, public administration, mental health, and social work.

## Recommended courses:

CRIM 121 Sociological Perspectives on Criminology
CRIM 201 White Collar Crime
CRIM 211 Crime and Inequality
CRIM 218 Crime Mapping
CRIM 224 Juvenile Delinquency
CRIM 240 Drugs, Social Control, and the Law
CRIM 270 Social Deviance
CRIM 313 The Culture of Punishment
SOCI 203 Introduction to Critical Race Theory
SOCI 230 Law and Society
SOCI 264 Black Communities and Institutions
SOCI 312 Sociology of Childhood and Adolescence
SOCI 333 Society, Mental Health, and the Individual

## Area of Focus: Gender Studies

Students who focus on gender studies closely examine the way in which gender systems are embedded into social institutions, culture, and everyday interactions. Courses teach students to develop methods of inquiry regarding gender that they can continue to apply in multiple realmsranging from family and intimate relationships to public policies related to crime and justice. As such, departmental areas of sociology, anthropology, and criminology can incorporate a productive focus on gender.

## Recommended courses:

ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
CRIM 321 Intimate Partner Violence
SOCI 212 Sociology of Families
SOCI 218 Women in Society
SOCI 233 Reproductive Rights and Reproductive Justice

SOCI 264 Black Communities and Institutions
SOCI 312 Sociology of Childhood and Adolescence
SOCI 359 Sex/Sexualities in Society

## Area of Focus: Human Services

This subfield is appropriate for students interested in careers in human services, such as non-profit agency administration, social work, counseling, community organizing, health care policy analysis, and health care administration. Additionally, this area of focus offers preparation for graduate study in social work, health care administration, law, sociology, psychology, education, and human resource management. The Human Services subfield provides an in-depth examination of the impact of social forces on human behavior.

```
Recommended courses:
    CRIM 224 Juvenile Delinquency
    SOCI 203 Introduction to Critical Race Theory
    SOCI 210 Latinxs in the United States
    SOCI 212 Sociology of Families
    SOCI 213 Social Class
    SOCI }233\mathrm{ Reproductive Rights and Reproductive Justice
    SOCI 245 Race and Ethnicity
    SOCI 248 Social Structure and the Self
    SOCI 263 Social Inequality
    SOCI 264 Black Communities and Institutions
    SOCI 280 Aging in Society
    SOCI }288\mathrm{ Immigration in the United States
    SOCI 306 Nonprofit Giving
    SOCI 312 Sociology of Childhood and Adolescence
    SOCI 321 Social Policy in Our Lives
    SOCI }325\mathrm{ Health and Illness
    SOCI 333 Society, Mental Health, and the Individual
    SOCI/EDUC 350 Education and Social Change
    SOCI 359 Sex/Sexualities in Society
    SOCI 366 Death and Dying
```


## Area of Focus: Social Justice

A focus on the study of social inequalities and the struggle to achieve a more equitable society and world. The area of focus examines class, race, ethnic, national, and gender divisions and their connections to major social and political problems. It also considers possible solutions and related strategies of social change. This subfield is suitable for students interested in political activism, government service, social work, teaching, law, and graduate work in the social sciences.

## Recommended courses:

ANTH 207 Global Issues in Anthropology
ANTH 253 Gender Across Cultures
ANTH 258 Critical Approaches to Men and Masculinities
CRIM 120 The Fight for Social Justice: Institutional Battlegrounds
SOCI 203 Introduction to Critical Race Theory
SOCI 210 Latinxs in the United States
SOCI 213 Social Class
SOCI 218 Women in Society
SOCI 233 Reproductive Rights and Reproductive Justice

SOCI 237 Capitalism, Race, and Social Control
SOCI 245 Race and Ethnicity
SOCI 263 Social Inequality
SOCI 264 Black Communities and Institutions
SOCI 288 Immigration in the United States
SOCI 308 Political Sociology: Who Rules?
SOCI 321 Social Policy in Our Lives
SOCI 356 Social Movements
SOCI 357 Sociological Perspectives on Globalization

## MINORS

## MINOR IN ANTHROPOLOGY (5 COURSES)

The following courses are required to complete this minor:
ANTH 161 Cultural Anthropology
Four (4) additional from the Anthropology (ANTH) area of focus.
Note: Criminology and Sociology majors who minor in Anthropology may not count Anthropology electives towards the major.

## MINOR IN CRIMINOLOGY (5 COURSES)

The following courses are required to complete this minor:
CRIM 121 Sociological Perspectives on Criminology
Choose four (4) additional course from the following list, at least two (2) of which must have a CRIM designation:

CRIM 120 The Fight for Social Justice: Institutional Battlegrounds
CRIM 201 White Collar Crime
CRIM 211 Crime and Inequality
CRIM 222 Global Criminology
CRIM 224 Juvenile Delinquency
CRIM 233 Victimization and Justice
CRIM 240 Drugs, Social Control, and the Law
CRIM 270 Social Deviance
CRIM 290 Topics in Criminology
CRIM 301 Criminological Theory
CRIM 308 Understanding Violence
CRIM 313 The Culture of Punishment
CRIM 321 Intimate Partner Violence
CRIM 330 Policing and Society
CRIM 336 Sexual Violence
CRIM 360 Media and Crime
CRIM 400 Topics in Criminology
CRIM 490 Independent Study in Criminology

```
HSTY 186 History of Modern Violence
HLTH 326 Drug, Alcohol, and Addictive Behavior
POSC 206 Constitutional Law: Powers of the Government
POSC 250 American Legal Systems
POSC 315 Judicial Politics and Policy
POSC 316 United States Constitutional Law and Politics
POSC 337 Legislative Politics and Policy
POSC 450 Internship in the Judicial System
PSYC 322 Abnormal Psychology
PSYC 373 Psychology and the Law
SOCI 203 Introduction to Critical Race Theory
SOCI 226 Sociology of Rap and Hip Hop
SOCI 230 Law and Society
SOCI 233 Reproductive Rights and Reproductive Justice
SOCI 245 Race and Ethnicity
SOCI 263 Social Inequality
SOCI 333 Society, Mental Health, and the Individual
NOTE: Sociology majors may not count the same course toward both the Sociology major and the Criminology minor.
```


## MINOR IN SOCIOLOGY (5 COURSES)

The following courses are required to complete this minor:
SOCI 101 Introduction to Sociology
Four (4) additional Sociology (SOCI) courses.

NOTE: Criminology majors may not count the same course toward both the Criminology major and the Sociology minor

## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

| Course | Doma |
| :---: | :---: |
| ANTH 161 Cultural Anthropology | III-B |
| ANTH 172 Interpreting the Past: Archaeological Perspectives | III-A |
| ANTH 203 Human Origins | III-A |
| ANTH 206 Forensic Anthropology | III-A |
| ANTH 207 Global Issues in Anthropology | III-C |
| ANTH 231 Great Discoveries in Global Archaeology | III-A |
| ANTH 243 Indigenous Cultures of North America | III-B |
| ANTH 253 Gender Across Cultures | III-B |
| ANTH 258 Critical Approaches to Men and Masculinities | III-B |
| ANTH 290 Non-Western Cultural Studies Tour | III-C |
| CRIM 120 The Fight for Social Justice: Institutional Battlegrounds | III-B |
| CRIM 121 Sociological Perspectives on Criminology | III-B |
| CRIM 201 White Collar Crime | III-B |
| CRIM 211 Crime and Inequality | III-B |
| CRIM 218 Crime Mapping | II-A |
| CRIM 224 Juvenile Delinquency | III-B |
| CRIM 240 Drugs, Social Control, and the Law | III-B |
| CRIM 270 Social Deviance | III-B |
| RAMS 101SO First-Year Seminar: Social Dynamics, Culture, and Society | III-B |
| SOCI 101 Introduction to Sociology | III-B |
| SOCI 130 Social Problems | III-B |
| SOCI 203 Introduction to Critical Race Theory | III-C |
| SOCI 204 Environmental Sociology | III-C |
| SOCI 210 Latinxs in the United States | III-C |
| SOCI 212 Sociology of Families | III-B |
| SOCI 213 Social Class | III-C |
| SOCI 218 Women in Society | III-B |
| SOCI 220 Sport in Society | III-C |
| SOCI 230 Law and Society | III-B |
| SOCI 245 Race and Ethnicity | III-C |
| SOCI 254 Social Conflict in Northern Ireland and Ireland | III-C |
| SOCI 263 Social Inequality | III-B |
| SOCI 264 Black Communities and Institutions | III-B |
| SOCI 280 Aging in Society | III-B |
| SOCI 282 Society, Technology, and the Future | III-B |
| SOCI 288 Immigration in the United States | III-C |

## World Languages

## Chair: Emilce Cordeiro

Professors: Emilce Cordeiro

Assistant Professors: Joanne E. Britland, Bruce Bucci, Nozomi Tomita
*Sabbatical: Fall 2024
**Sabbatical: Spring 2025

## Majors

The Department of World Languages offers a Bachelor of Arts (B.A.), with majors American Sign Language, Spanish, and World Languages.

## General Education Domain I-C

Students may meet the general education Domain I-C through one of the following ways:

- Complete one semester of a college-level foreign language;
- Request a waiver from the Chair of World Languages if their high school academic language is other than English (usually applied to international students).

A successful waiver of Domain I-C does not reduce the number of courses students must take to fulfill the overall general education requirements. Students with this waiver must complete another requirement within Domain I-A, I-B, or I-C.

## Language Course Placement

All students who plan to study a language with which they have prior experience with must take the Emmersion Language Placement exam in a semester prior to enrolling in the desired language course.
Students are not required to take the language placement test if they:

- speak another language fluently; or
- have no prior experience with the language they plan to study; or
- have transferred in a language course at the Elementary I level or higher; or
- have satisfied the MassTransfer General Education Foundation Block.


## Emmersion Language Placement Tests

These tests are administered in the Academic Advising Center (contact this office for reservations).

## Language Code Interpretation

## Code Placement

0 Student has not taken the Emmersion Placement test.
1 Earned a 1 in the Emmersion Placement test:
Eligible to enroll in Elementary I of the language in which the student tested.
2 Earned a 2 in the Emmersion Placement test:
Eligible to enroll in Elementary II of the language in which the student tested.
Earned a 3 in the Emmersion Placement test:
Eligible to enroll in Intermediate I of the language in which the student tested.
4
Earned a 4 in the Emmersion Placement test:
Eligible to enroll in Intermediate II of the language in which the student tested.
5 Earned a 5 or above in the Emmersion Placement test:
Eligible to enroll in a 200 -level course beyond Intermediate II of the language in which the student tested.
6 Waiver received from World Languages Department Chair. Students may petition for the waiver if their high school language is other than English (usually applies to international students).

## AMERICAN SIGN LANGUAGE MAJOR (U_AS)

The American Sign Language program provides students with a foundation in American Sign Language (ASL) and associated courses that cover the history, culture, and literature of the Deaf Community in the U.S. within a social justice framework. Students choose to concentrate in American Sign Language/English Interpreting or in Deaf Studies. Students with prior knowledge of, or instruction in, ASL must be assessed to determine their level of entry into the ASL course sequence. To request an assessment, contact the ASL program coordinator. Students with no prior ASL instruction or exposure will begin the program at ASGN 101 Elementary American Sign Language I.

## Departmental Requirements

## Major Required Core (5):

ASGN 200 American Sign Language Linguistics
ASGN 301 Advanced American Sign Language I
ASGN 302 Advanced American Sign Language II
ASGN 401 Advanced American Sign Language III
ASGN 402 Advanced American Sign Language IV

## CONCENTRATION IN ASL/ENGLISH INTERPRETING (UASE)

The ASL/English Interpreting concentration provides students with a theoretical and practical foundation in the knowledge, values, skills, and ethical judgment necessary for the successful transfer of meaning, cultural mediation, and professional conduct required of working interpreters. The goal of the program is to graduate students who are prepared to take and pass state or nationallevel credentialing exams within one year of graduation. Students are involved in coursework, research, community engagement, and practicum experiences within the context of a public liberal arts education that seeks to strengthen and deepen the knowledge base and critical thinking skills that all successful interpreters must possess.

## Program Learning Objectives

Graduating students should be able to:

- Communicate in their working languages (American Sign Language and English) at level of proficiency equivalent to the Advanced High Level of speaking and listening as established by the American Council of Teachers of Foreign Language.
- Interpret in settings appropriate to entry-level interpreters.
- Integrate their knowledge of the history, culture, values and diversity of the Deaf/Hard of Hearing/DeafBlind communities into their interpreting practice.
- Integrate their knowledge of interpersonal and intercultural communication dynamics into their interpreting practice.
- Participate in undergraduate-level research in interpreting or linguistics.


## Concentration Core Requirements (10 courses; $\mathbf{8}$ course-credits):

ASGN 242 Communication Dynamics in Interpreted Encounters ( 0.5 course-credit)
ASGN 321 American Sign Language/English Interpreting I
ASGN 322 American Sign Language/ English Interpreting II
ASGN 330 Reading and Analysis of Research in Interpreting ( 0.5 course-credit)
ASGN 333 Ethical Decision-Making in the Interpreting Profession ( 0.5 course-credit)
ASGN 340 Undergraduate Research in Interpreting ( 0.5 course-credit)
ASGN 413 American Sign Language/English Interpreting III
ASGN 414 American Sign Language/English Interpreting IV
ASGN 451 Interpreting Practicum and Seminar I
ASGN 452 Interpreting Practicum and Seminar II

## Deaf Studies Courses (4):

DFST 101 Introduction to Deaf Studies
DFST 201 Introduction to the Interpreting Profession
DFST 222 Introduction to American Sign Language Literature
DFST 236 Social Justice and the Deaf Community

## Related Required Courses (2):

ANTH 161 Cultural Anthropology
COMM 107 Effective Speaking

## CONCENTRATION IN DEAF STUDIES (UASD)

The Deaf Studies concentration provides students with a foundation in American Sign Language (ASL) and associated courses that cover the history, culture, and literature of the Deaf Community in the U.S. in a social justice framework. Students graduating with this concentration qualify for entry-level work in Deaf services agencies, residential programs, and educational and human service settings requiring fluency in ASL. Graduates of this program also qualify to pursue graduate studies in Deaf education, rehabilitation counseling, linguistics, or social work, among other fields. The knowledge and skills acquired in this program may also be applied to other professional domains where Deaf/Hard of Hearing/DeafBlind individuals are served.

## Program Learning Objectives

Graduating students should be able to:

- Communicate in American Sign Language at a level of proficiency equivalent to the Advanced Low Level of speaking and listening as established by the American Council of Teachers of Foreign Languages.
- Integrate their knowledge of the history, culture, values and diversity of the Deaf/Hard of Hearing/DeafBlind communities into their interactions with D/HH/DB individuals.
- Design an advocacy project that integrates their understanding of the impact of power, privilege and oppression on the Deaf experience.


## Concentration Core Requirements (4 courses):

DFST 101 Introduction to Deaf Studies
DFST 222 Introduction to American Sign Language Literature
DFST 236 Social Justice and the Deaf Community
DFST 450 Seminar and Externship in Deaf Studies

## One (1) Related Required Course:

ANTH 161 Cultural Anthropology

## Choose One (1) Related Elective from the following courses:

CFST 118 Child, Family, School, and Community: Connections and Collaborations
CFST 212 Disability in Society
EDUC 205 Equity in Educational Settings

## SPANISH MAJOR (U_SP)

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain I-C (Language) requirement is satisfied through the completion of the Spanish major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Spanish Major Requirements:

A total of twelve (12) courses are required for this major/concentration.
Core Requirements ( 5 courses):
SPAN 202 Intermediate Spanish II*
SPAN 211 Advanced Spanish Grammar and Conversation
SPAN 212 Advanced Spanish Grammar and Composition
SPAN 245 Interpreting Hispanic Literature
*Note: If the student is placed at the advanced level they should take another Spanish course at the 200-level or above.

## Capstone:

SPAN 480 Seminar in Spanish

## CONCENTRATION IN SPANISH - GENERAL STUDIES (USPG)

Concentration requirements (7 courses):
List of electives: students may select the courses from the following list:
A minimum of 1 elective at the 200-level or above
A minimum of 3 electives at the 300 -level or above
A minimum of 2 electives at the 400 -level:
ENGL 275 Contemporary Latinx Literature
LING 200 Language and Linguistics
SPAN 210 Cinema for Spanish Conversation
SPAN 225 Business Communication in Spanish
SPAN 234 Music and Culture in the Hispanic World
SPAN 333 Iberian Culture and Civilization
SPAN 334 Latin American Culture and Civilization
SPAN 341 Survey of Iberian Literature
SPAN 342 Survey of Latin American Literature
SPAN 375 Graphic Narrative
SPAN 382 Television and New Media in the Hispanic World
SPAN 388 Spanish Cinema in Post-Franco Spain
SPAN 400 Introduction to Translation
SPAN 426 The Spanish Civil War
SPAN 431 Contemporary Trends of the Hispanic World

SPAN 446 Testimonial Literature of the Dirty War
SPAN 448 Controversial Cinema in Latin America
SPAN 490 Independent Study in Spanish
SPAN 495 Internship Practicum in Spanish

## WORLD LANGUAGES AND LINGUISTICS MAJOR (U_LL)

The World Languages and Linguistics major is unique in the Massachusetts State University system. Students in this major engage in the comparative study of languages and in the science of linguistics. This major offers students a foundation in language and linguistic skills, as well as knowledge of diverse cultures. The program prepares students to meaningfully interact in a global and multilingual environment.

## The General Education Requirement

All students must satisfy a general education requirement consisting of ten (10) courses outside of the major department. The General Education Domain I-C (Language) requirement is satisfied through the completion of this major.

## Course Prerequisites

Courses may have specified conditions for enrollment, such as prior completion of less advanced courses, permission of the instructor, or appropriate placement test scores. Students should refer to course descriptions in the department listings for prerequisite requirements.

## Major Requirements:

A total of twelve (12) courses are required for the program.

## Core Requirements (three (3) courses):

LING 110 The Languages of the World
LING 200 Language and Linguistics
Capstone - Choose one (1):
ASGN 490 Independent Study in American Sign Language
FREN 490 Independent Study in French
LING 490 Independent Study in Linguistics
PORT 490 Independent Study in Portuguese
SPAN 490 Independent Study in Spanish

## CONCENTRATION IN LANGUAGE AND LINGUISTICS - GENERAL STUDIES <br> (ULLG):

Concentration requirements - Nine (9) electives courses:
Students must take a minimum of nine (9) language courses in a minimum of two (2) languages other than English.

## MINORS

## MINOR IN AMERICAN SIGN LANGUAGE (5 COURSES)

This minor allows students to develop conversational fluency in American Sign Language and to gain a basic understanding of the culture and history of the Deaf/Hard of Hearing/DeafBlind communities in the United States.

## Five (5) required courses:

DFST 101 Introduction to Deaf Studies
Four (4) American Sign Language (ASGN) language-learning courses from the list below, taken consecutively, beginning at the level determined by the placement interview:

ASGN 101 Elementary American Sign Language I
ASGN 102 Elementary American Sign Language II
ASGN 201 Intermediate American Sign Language I
ASGN 202 Intermediate American Sign Language II
ASGN 301 Advanced American Sign Language I
ASGN 302 Advanced American Sign Language II
ASGN 401 Advanced American Sign Language III
ASGN 402 Advanced American Sign Language IV
Recommended additional course:
DFST 236 Social Justice and the Deaf Community

## MINOR IN PORTUGUESE (5 COURSES)

This minor allows students to develop conversational fluency in the Portuguese language and to gain an understanding of the Lusophone culture and history of the Brazilian, Portuguese, and Cape Verdean communities in the United States. Courses in the minor may also be used to fulfill general education requirements.

Five (5) required courses from the list below:
PORT 101 Elementary Portuguese I or
PORT 110 Elementary Portuguese for Spanish Speakers
PORT 102 Elementary Portuguese II
PORT 201 Intermediate Portuguese I
PORT 225 Business Communication in Portuguese
PORT 300 Portuguese in the Community
PORT 490 Independent Study in Portuguese
PORT 495 Internship in Portuguese

## MINOR IN SPANISH (5 COURSES)

A minimum of five (5) Spanish courses is required for the minor.

## MINOR IN WORLD LANGUAGES AND LINGUISTICS (5 COURSES)

This minor is designed for students who are interested in the comparative study of languages through exposure to two or more languages. Students are encouraged to take courses in languages that are new to them.

Five (5) required courses from the list below:
LING 110 The Languages of the World or
LING 200 Language and Linguistics
Four (4) courses in at least two languages. Students may choose from the following list, or take additional language courses not listed here with permission from the department chair:

```
ASGN 101 Elementary American Sign Language I
ASGN 102 Elementary American Sign Language II
ASGN 201 Intermediate American Sign Language I
CHIN 101 Elementary Chinese I
CHIN }102\mathrm{ Elementary Chinese II
FREN }101\mathrm{ Elementary French I
FREN 102 Elementary French II
PORT 101 Elementary Portuguese I
PORT }102\mathrm{ Elementary Portuguese II
RUSS 101 Elementary Russian I
RUSS 102 Elementary Russian II
SPAN 101 Elementary Spanish I
SPAN 102 Elementary Spanish II
SPAN 201 Intermediate Spanish I
SPAN 202 Intermediate Spanish II
```


## COURSES APPROPRIATE FOR GENERAL EDUCATION (GEN. ED.)

## Course

| ASGN 101 Elementary American Sign Language I | I-C |
| :---: | :---: |
| ASGN 102 Elementary American Sign Language II | I-C |
| CHIN 118 Chinese Writing System and Calligraphy | I-B |
| CHIN 101 Elementary Chinese I | I-C |
| CHIN 102 Elementary Chinese II | I-C |
| CHIN 118 Chinese Writing System and Calligraphy | I-B |
| CHIN 186 Through the Dragon's Eyes: Modern China's Cultures and Traditions | III-C |
| CHIN 201 Intermediate Chinese I | I-C |
| CHIN 202 Intermediate Chinese II | I-C |
| DFST 101 Introduction to Deaf Studies | III-B |
| FREN 101 Elementary French I | I-C |
| FREN 102 Elementary French II | I-C |
| FREN 201 Intermediate French I | I-C |
| FREN 202 Intermediate French II | I-C |
| LING 110 The Languages of the World | III-C |
| LING 200 Language and Linguistics | III-C |
| PORT 101 Elementary Portuguese I | I-C |
| PORT 102 Elementary Portuguese II | I-C |
| PORT 110 Elementary Portuguese for Spanish Speakers | I-C |
| PORT 201 Intermediate Portuguese I | I-C |
| PORT 225 Business Communication in Portuguese | I-C |
| RUSS 101 Elementary Russian I | I-C |
| RUSS 102 Elementary Russian II | I-C |
| SPAN 101 Elementary Spanish I | I-C |
| SPAN 102 Elementary Spanish II | I-C |
| SPAN 201 Intermediate Spanish I | I-C |
| SPAN 202 Intermediate Spanish II | I-C |
| SPAN 210 Cinema for Spanish Conversation | I-C |
| SPAN 225 Business Communications in Spanish | I-C |
| SPAN 234 Music and Culture in the Hispanic World | I-C |

I-B
I-C
I-C
I-B

III-C
I-C
I-C
III-B
I-C
I-C
I-C
I-C
III-C
III-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C
I-C

## Framingham State University

BOARD OF TRUSTEES 2024-2025 ACADEMIC YEAR
Beth Casavant - Chair
Shrewsbury Select Board Chair
Anthony E. Hubbard, J.D. - Vice Chair
Senior Legal Counsel, CVS Health.
Nancy Budwig, Ph.D.
Associate Provost and Dean of Research, Clark University
Lino Covarrubias
Chief Executive Officer, Jewish Family Services (JFS) of Metrowest
Diane Finch '66, Ph.D.
Kevin Foley '84
Vice President, Finance \& General Accounting, TJX Companies
Mariel Freve
Vice President \& Chief Accounting Officer, Sensata Technologies
Michael E. Grilli, P.E.
Founder and Chairman, BETA Group, Inc.
Ryan J. Mikelis '24
Student Trustee
Claire Ramsbottom '79
Executive Director, Colleges of the Fenway, Inc.

## THE COMMONWEALTH OF MASSACHUSETTS

## SECRETARY OF EDUCATION

Patrick Tutwiler, Ph.D.

## COMMISSIONER OF HIGHER EDUCATION

Noe Ortega, Ph.D.

## DEPARTMENT OF HIGHER EDUCATION BOARD MEMBERS

Chris Gabrieli, Chair
Veronica Conforme, Chair of Finance, Administration, Accountability \& Performance
Advisory Council
Alex Cortez
Bill Walczak, Community College Trustee Representative, Chair of Strategic Planning Advisory Council
Voting Members:
Danielle Allen, Ph.D.
Mary Burns, University of Massachusetts Trustee Representative
Harneen Chernow
Ann Christensen (Biography)
Paul Mattera, J.D., State University Trustee Representative
Judy Pagliuca
Christina Royal, Ed.D.,
Patrick Tutwiler, Ph.D., Secretary of the Executive Office of Education
Non-Voting Positions:
Noe Ortega, Ph.D., Ex Officio, Commissioner of Higher Education, Secretary to the Board
J.D. LaRock, J.D., Ed.D., Co-Chair of Finance, Administration, Accountability \& Performance Advisory Council
Francesca Purcell, Ph.D., Co-Chair of Strategic Planning Advisory Council
Andrew Whitcomb, University of Massachusetts Student Advisor, University of Massachusetts Lowell

## Administration

## Office of the President

Nancy Niemi, President
B.A., University of Rochester; M.A., Elmira College; Ph.D., University of Rochester

## Office of the Chief of Staff \& General Counsel

Ann McDonald, Chief of Staff \& General Counsel, and Secretary to the Board of Trustees
B.S.Ed., Westfield State University; M.Ed., University of Massachusetts - Amherst; J.D., New England Law - Boston
David Sargeant, Associate Director/Enterprise Risk Management and Internal Assessment Manager
B.S., Boston University; M.A., Northeastern University

## Division of Administration, Finance, and Technology

Dale M. Hamel, Executive Vice President of Finance, Administration, and Technology
B.S., B.A., Ferris State University; M.B.A., University of North Carolina, Chapel Hill; Ed.M., Boston University; Ph.D., Boston College

## ATHLETICS

Thomas Kelley, Director and Head Football Coach
B.S., Framingham State College; M.Ed., Boston State College

Carey Williams Eggen, Associate Director/Deputy Director and Title IX Coordinator
B.S., M.Ed., C.A.G.S., Springfield College

Kathleen Lynch, Assistant Director/Assistant Director of Sports Information B.S., M.A., Framingham State College

Kristine Brown, Staff Assistant/Assistant Athletic Trainer
B.S., University of Massachusetts Lowell; M.S., University of Rhode Island

Casey Bradley, Staff Assistant/Assistant Building Manager \& Intramurals
Coordinator and Head Coach Women's Lacrosse
B.A., Framingham State College

Richard Casali, Staff Assistant/Equipment \& Operations Manager and Head
Coach Women's Volleyball
B.A., Framingham State College

Cully Curran, Staff Assistant/Recruiting \& Club Sports Coordinator and
Assistant Football Coach
B.S., Framingham State University

Mark Greenfield, Staff Assistant/Athletic \& Recreation Center Manager
B.S., M.A., Kent State University

Mark Johnson, Staff Assistant/Head Coach Men's \& Women's Cross Country, Head Couch Women Outdoor Track \& Field
B.S., Lasell University

Larry Miller, Staff Assistant/Assistant Sports Information Director and Head Coach Women's Softball<br>B.S., M.S., State University of New York (SUNY) College at Cortland<br>Walter Paschal, Staff Assistant/Home Events Coordinator and Head Woman's Basketball Coach<br>B.S., Bridgewater State College

Laura Rusk, Staff Assistant/Head Athletic Trainer
B.S., Iowa State University; M.P.A., Drake University

Damon White, Staff Assistant/Assistant Athletic Trainer
B.S., Springfield College; M.S., California University of Pennsylvania

## OFFICE OF THE BURSAR/STUDENT ACCOUNTS

Laura Rancatore, Director/Bursar
B.S., Northeastern University

Samantha Landry, Associate Dir \& $/$ /Associate Bursar B.S., M.P.A., Framingham State Universit) puF

Peter Chrisafideis, Assistant ${ }^{\text {Cbief }}$ of Stroffingls ant Bursar
B.A., Hellenic College Holy Cross

## OFFICE OF FACILITIES \& CAPITAL PLANNING

Daniel Giard, Executive Director of Facilities Operations
Ann Martin, Director/Capital Projects Manager
B.A., Assumption University; M.B.A., Fitchburg State University

Maureen Bagge Fowler, Director/Environmental Health \& Safety Coordinator B.S., University of Massachusetts Amherst; M.B.A., University of Massachusetts Boston

Kenneth Brasili, Director/Power Plant and Support Services
Timothy Kiley, Assistant Director/Property Control \& Parking Clerk B.S., Anna Maria College

## OFFICE OF FINANCIAL SERVICES

Jeanne Deree, Associate Vice President for Fiscal Affairs
B.S., Bryant College; M.B.A., University of Massachusetts Amherst

Anastasia (Natasha) Bizanos-Ashe, Director of Procurement and Contracts
B.A., University of Massachusetts Amherst; J.D., Western New England University

Collette Blais, Director/Budget \& Treasury Services
B.S., Framingham State University

Josette Farnham, Executive Director/Controller B.A., Assumption College; M.B.A., Fitchburg State University

Erica Henault, Director/Assistant Controller
B.S.B.A., M.B.A. Nichols College

Moira Rouse, Staff Associate/Capital Construction Procurement Manager B.A., M.P.A., Clark University

## OFFICE OF HUMAN RESOURCES \& PAYROLL

Kimberly Dexter, Assistant Vice President for Human Resources and Equal Opportunity University Title IX Coordinator B.A., University of Maryland, College Park; M.S., Worcester State College

David N. Baldwin, Director of Human Resources
B.S., M.S., The College of St. Rose

Erin Jerrett, Assistant Director of Equal Opportunity \& Deputy Title IX Coordinator
B.A., Assumption University; M.P.A., Clark University

April Facchini, Director/Compensation, Payroll, \& Benefits Administration B.S., Assumption College

Madeline Mejias, Staff Assistant/Benefits, \& Human Resources Specialist
Samreen Syed, Staff Associate/Payroll Manager
B.Com., M.Com., Karachi University

## DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES

Patrick D. Laughran, Associate Vice President \& Chief Information Technology Officer
B.S., Northeastern University; M.B.A., Babson College

Marsha Bryan, Director of Administrative and Student Information Systems B.S., Seton Hall University; M.B.A., University of Maryland

Corey Hobbs, Director/Information Security Officer B.S., M.B.A., Framingham State University

Robin Robinson, Director of Education Technology, Learning Spaces, \& Innovation
B.A., University of Massachusetts, Amherst; M.T.P.W., Northeastern University

Michael S. Zinkus, Executive Director of Infrastructure \& Operations
B.S. Framingham State College

Susan Arsenault, Staff Assistant/Systems Analyst \& Programmer
B.S., Framingham State College

Kristen Corey, Staff Assistant/Applications Analyst
B.A., Emmanuel College; M.S., Framingham State University

Steven Courchesne, Staff Assistant/Instructional Designer
B.A., Concordia University; M.A., Brandies University

Michael Darcy, Staff Assistant/Technology Support Operations Manager B.S., Framingham State College

Michelle Fallon, Staff Assistant/Developer, Business Intelligence
Brooklyn Famosi, Staff Associate/Business Analyst for Enrollment Management B.S., M.Ed.; Framingham State University

Judith Foley, Staff Associate/Manager of Campus Technology Services
B.A., M.Ed.; University of Massachusetts Boston

Jacqueline Harrington, Staff Assistant/Microsoft 365 Solutions Specialist
B.S.; Framingham State University

Andrew Carney, Staff Assistant/Security Systems Solutions Specialist
B.A., Framingham State University

Kevin Kennedy, Staff Assistant/Training \& Support Coordinator
B.A., M.A., Bridgewater State University

William Leger, Staff Assistant/Telecom Administrator

David Lopes, Staff Assistant/Systems Administrator
B.A., Framingham State College

Corrie Lovell, Staff Assistant/Technical Support Analyst
B.S., Framingham State University
B.A., Pine Manor College

Mary MacDonald, Staff Assistant/Senior Instructional Technologist
B.A., University of Massachusetts Amherst; M.Ed., University of Massachusetts Boston

Florentine Overko, Staff Associate/Manager of Technology Support Services B.A., Pine Manor College

David Pfarrer, Staff Associate/Linux Systems Administrator
B.A., Vassar College; M.A., Binghamton University

Nicola Sellitto, Staff Assistant/Network Engineer
William Shew, Staff Assistant/Administration \& Student Information Systems
Coordinator
B.S., Framingham State College

Bryan Smith, Staff Associate/Network Services Manager

## UNIVERSITY SERVICES

Office of Transportation Services Programs \& Community Education
Kim Galvani, Staff Associate/Coordinator of Transportation Services

## Division of Academic Affairs

Porter-Utley, Kristen, Provost and Vice President of Academic Affairs
B.A., M.S., Ph.D., University of Florida Gainsville

Reema Zeineldin, Associate Vice President for Academic Affairs Operations, Finance, and Institutional Effectiveness
B.S., M.S., Kuwait University; Ph.D., University of New Mexico

Mark Nicholas, Assistant Vice President for Assessment, Accreditation, and Strategic Planning
B.A., Bangalora University; M.A. Karnataka State University; M.A. Cincinnati Christian University; Ph.D., University of Cincinnati

## DEANS OF THE COLLEGES:

## College of Arts and Humanities

T. Stores, Dean
B.A., M.A., Emerson College

## College of Business

Patricia E. Thomas, Dean
B.B.A., Midwestern State University; M.S., University of North Texas;

College of Education and Social \& Behavioral Sciences
Susan Dargan, Dean
B.A. Simmons College; M.A., Ph.D., Boston University

College of Science, Technology, Engineering, and Mathematics
Lauren Nolfo-Clements, Dean
B.S., The College of New Jersey; Ph.D., Tulane University

## CENTERS AND INSTITUTES:

## Center for Excellence in Learning, Teaching, Scholarship, and Service (CELTSS)

May Hara, Faculty Director
B.A., Cornell University; M.S., City University of New York; Ph.D., University of Wisconsin Madison; Associate Professor, Education

Lissa Bollettino, Associate Faculty Director
B.A., Brown University; M.A., Ph.D., University of Texas, Austin; Professor, History

Cara Pina, Faculty Director of Mentoring
B.S., University of Massachusetts Amherst; Ph.D., Brandeis University; Associate Professor, Biology

Mirari Elcoro, Faculty of Color Mentoring Coordinator
B.A., Andres Bello University; M.S., Ph.D., West Virginia University; Associate Professor, Psychology

## Centers for Early Childhood Education

Valerie Hytholt, Director
B.A., University of California Davis; M.Ed., Framingham State University

## Jean M. Canelli Child Development Lab

Vacant, Assistant Director

Erin Kartunen, Staff Assistant/Lead Teacher
Julie Wilson, Staff Assistant/Lead Teacher
B.S., Fitchburg State University

## Early Childhood Center

Cara Chase, Assistant Director
B.S., Suffolk University

Aivia Pimental, Staff Assistant/Lead Teacher
Ashley Rendel, Staff Assistant/Lead Teacher

## Christa Corrigan McAuliffe Center and Challenger Learning Center

Irene Porro, Director and Professional Development Programs Coordinator B.S./M.S., University of Torino; Ph.D., University of Podava

Suzanne Wright, Assistant Director
Ross Barros-Smith, Assistant Director/Planetarium \& Media Technology Manager
Justine Greenwood, Staff Assistant/Communication \& Digital Media
Coordinator
B.A., Framingham State University

Commonwealth Honors Program
Gregory Halfond, Coordinator
B.A., M.A., Ph.D., Boston College; Professor, Philosophy

## Entrepreneur Innovation Center

Christimara (Christy) Garcia, Director
B.A., Universidade Federal de Minas Gerais; M.B.A., Funacao Getulio Vargas

Stalker Institute
Karen McGrail, Director
B.S., M.Ed., Framingham State University

Shelia Pellegrini, Staff Assistant/Manager of Operations
Jumana Whelan, Assistant Director/Manager of Culinary Programs B.A., University of Massachusetts Amherst; M.S., Framingham State University

Lynnea Spencer, Assistant Director/ Manager of Education \& Wellness B.S., M.Ed., Framingham State University

OFFICE OF EDUCATION PLACEMENT AND LICENSURE
Sandra Shaw, Director
B.A., Merrimack College; M.Ed., Lesley University

Kate Stewart, Staff/Assistant/Date Management Coordinator
B.A., University of Massachusetts Amherst; Ed.M., Boston University

## OFFICE OF INSTITUTIONAL EFFECTIVENESS

Ann K. Caso, Director of Institutional Research
B.A., University of Dhaka; M.S., Wayne State University

Mehwash Azim, Staff Associate/Data Analyst and Visualization Specialist B.B.A., University of Massachusetts Amherst; M.Ed., Suffolk University

Jena Sheppard, Assistant Director/Assistant Director for Institutional Effectiveness
B.S., Salem State University; M.B.A., Fitchburg State University

## OFFICE OF THE UNIVERSITY REGISTRAR

Mark R. Powers, Executive Director/University Registrar \& Executive Director for Student Records and Registration Services
B.A., North Adams State College

Anna Dragsbaek, Associate Director/Senior Associate University Registrar B.S., Syracuse University; M.S., Northeastern University

Vacant, Associate Director/Associate University Registrar for Student Records Management and Transfer Articulations
B.S., University of Rhode Island

David Morini, Assistant Director/Assistant University Registrar for Operations and Systems
B.A., University of Massachusetts Amherst; M.F.A., California College of the Arts; M.P.A., Framingham State University
Virginia Lane, Assistant Director/Assistant University Registrar for Student and Course Data
B.A., Skidmore College; M.A., Suffolk University

## HENRY WHITTEMORE LIBRARY

Virgen (Millie) Gonzalez, Dean of the Library
B.A., Hamilton College; M.S.L.S., MBA, Simmons College

Jonathan Golden, Assistant Librarian/Scholarly Resources Acquisitions \& Management Librarian
Suzanne Meunier, Associate Librarian/Metadata Librarian
B.A., Keene State College; M.S.L.S., Simmons College

Hedda Monaghan, Assistant Librarian/Student Success \& Assessment Librarian B.S., University of Massachusetts Amherst; M.L.I.S., The University of British Columbia

Abelard Newell, Assistant Librarian/E-Resources \& Digital Repository Librarian
B.A., University of Toronto; M.S.L.S., Simmons College

Colleen Previte, Associate Librarian/Archivist \& Special Collections Librarian
B.A., Worcester State College; M.S.L.S., University of Rhode Island

Sandra Rothenberg, Senior Librarian/Coordinator of Library Instruction \& Resource Librarian
B.A., Wheaton College; M.A., Brown University; M.S.L.S., Simmons College

Samantha Westall, Associate Librarian/Curriculum Librarian B.A., University of Indiana; M.L.I.S., University of Rhode Island

## DIVISION OF GRADUATE STUDIES AND CONTINUING EDUCATION

Marilyn Cleary, Dean of Graduate and Continuing Education
B.S., Worcester Polytechnic University, Ed.D., Northeastern University

Elena Arranz Alonso, Associate Dean of Graduate and Continuing Education B.A., Universidad de Salamanca; B.A., Worcester State University; M.A., University of Connecticut

Ann Roberti, Executive Director of English Language Programs \& Community Education
B.S., Georgetown University; M.A., Columbia University, Ph.D., University of Pennsylvania

Michael Merriam, Assistant Dean/Director of Graduate \& Continuing
Education Recruitment
B.A., Becker College; M.M., Cambridge College

Maura Kelly, Director/Director of Accelerate the Future Cohort Program
B.A., University of New Hampshire; M.S., Suffolk University

Jeffrey Masse, Associate Director/Graduate \& Continuing Education
Recruitment
B.S., M.B.A., University of Massachusetts Boston

Joyce Fahey, Director/Director of C. Louis Cedrone International Education Center

Zoe Moore, Assistant Director/Assistant Director of Graduate Recruitment Cohort Programs
B.A., Framingham State College

Vacant, Assistant Director/Assistant Director of English Language Programs \& Community Education

## Division of Inclusive Excellence and Community Engagement

Jeffrey K. Coleman, Vice President for Diversity, Inclusion, \& Community Engagement/Chief Diversity \& Inclusion Officer<br>B.A., Trinity College; M.S., Central Connecticut State University; Ph.D., University of North Carolina Greensboro

## CENTER FOR INCLUSIVE EXCELLENCE

Jerome Burke, Director of the Center for Inclusive Excellence
L.L.B. University of Technology Jamaica; M.A., The University of the West Indies

Emma Laurie, Staff Assistant/Program Coordinator for Inclusive Excellence
B.A., Framingham State University

## METROWEST COLLEGE PLANNING COLLABORATIVE (MCPC)

Dana Fusco, Executive Director
B.A., State University of New York New Paltz; Ph.D., The City University of New York

Roxana Marrero, Director/Senior Director of Early College \& Community
Growth
B.S., Framingham State University

Mabel Grace Mathias, Assistant Director/Assistant Director of the College Planning Collaborative
B.A., Framingham State University

Erika Reyes-Gittleman, Assistant Director/Assistant Director of the College Planning Collaborative
B.A., Providence College

## Division of Strategic Enrollment Management

Iris Godes, Dean of Strategic Enrollment Management \& Chief Enrollment Officer
B.S., Syracuse University; M.Ed., Boston University

Kathleen Brosnihan, Staff Associate/Assistant to the Dean of Enrollment Management
A.A., Quinsigamond Community College

## ADMISSIONS

Shayna Eddy, Senior Associate Dean for Admissions \& Director of
Undergraduate Admissions
B.A., M.A., Framingham State College

Nicole Bergin, Associate Director/Associate Director of Undergraduate Admissions
B.S., Bridgewater State University; M.H.R., Framingham State University

Erica Pritchard, Associate Director/Associate Director of Undergraduate Admissions
B.A., Emmanuel College; M.P.A., Framingham State University

Brittany Plante, Associate Director/Admissions Operations

Vacant, Associate Director/Slate Customer Relationship Manager (CRM)
Willian (Bill) Abbate, Assistant Director/Assistant Director of Admissions
B.S., Boston University

Kirsten Hoey, Assistant Director/Assistant Director of Admissions \& Campus Visit Experience Manager
B.A., Framingham State University; M.Ed., Merrimack College

Olivia (Liv) Beverlie, Staff Assistant/Undergraduate Admissions Counselor
B.A., Framingham State University

Nicole Lussier, Staff Assistant/Undergraduate Admissions Counselor
B.A., Smith College

Jenna Saade, Staff Assistant/Undergraduate Admissions Counselor
B.A., University of Massachusetts Lowell

## FINANCIAL AID

Caitlin Laurie, Director
B.A., M.S., Clark Hopkins University

Susan E. Lanzillo, Associate Director
B.S., Bentley College; M.Ed., University of Massachusetts, Lowell

Traci Wynn Hickey, Assistant Director
B.A., University of Massachusetts, Amherst; M.A., Elms College

Mary E. Ford, Staff Assistant/Financial Aid Counselor
B.A., Framingham State College

Michelle Tosi, Staff Assistant/Financial Aid Counselor

## OFFICE OF UNIVERSITY COMMUNICATIONS

Daniel Magazu, Director/Director of Communications
B.A., University of Massachusetts - Amherst

Luis Rodriguez, Staff Associate/Graphic Design Specialist
B.S., Framingham State College

## OFFICE OF UNIVERSITY MARKETING

Averil Capers, Director/Director of Marketing
B.S., Clark University; M.B.A., Assumption College

Christina Casinelli, Staff Assistant/Social Media Coordinator
B.S., Fitchburg State University

Lam Dinh, Staff Assistant/Web Developer
B.S., University of Massachusetts Boston

## Division of Student Affairs

Margaret (Meg) Nowak Borrego, Vice President for Student Affairs and Dean of Students
B.A., State University of New York at Buffalo; M.S., Indiana State University; Ph.D., Boston College

## CAMPUS MINISTRY

Kristelle Angelli, Catholic Chaplain
Rev. Dr. J. Anthony Lloyd, Community Chaplain
Pastor David Choi, Evangelical Chaplain
Rabbi Sam Blumberg, Jewish Chaplain
Rehan Khan, Muslim Representative

## COUNSELING CENTER

Benjamin Day, Director of Counseling Center
A.L.B., Harvard University; M.A., Boston Graduate School of Psychoanalysis

Rupal Bhatt, Assistant Director/Counselor
B.A., Mount Holyoke; M.A., Psy.D., University of Hartford

Jeanne Haley, Staff Associate/Counselor
B.A., College of the Holy Cross; M.S.W., Boston University

Alexandra Libstag, Staff Associate/Staff Counselor
B.A., Brandies University; M.S.W., Boston College

## HEALTH SERVICES

Anne Lyons, Director of Health Services \& Nurse Practitioner
B.S.N., University of Rhode Island; M.S.N., Regis College

Pamela Lehmberg, Staff Associate/Wellness Education Coordinator
Lacey Parker, Staff Associate/Nurse Practitioner
OFFICE OF UNIVERSITY MARKETING \& COMMUNICATIONS
Averil Capers, Director/Director of Marketing
B.S., Clark University; M.B.A., Assumption College

Daniel Magazu, Director/Director of Communications
B.A., University of Massachusetts - Amherst

Sara Mulkeen, Staff Associate/Manager for Digital Communications \& Interactive Media
B.A., M.P.A., Framingham State University

Christina Casinelli, Staff Assistant/Social Media Coordinator
B.S., Fitchburg State University

Lam Dinh, Staff Assistant/Web Developer
B.S., University of Massachusetts Boston

Luis Rodriguez, Staff Associate/Graphic Design Specialist
B.S., Framingham State College

## OFFICE OF RESIDENCE LIFE \& HOUSING

Stephanie Crane, Associate Director of Residence Life
B.A., Hartwick College; M.Ed. University of Maine

Christopher Addario, Assistant Director/ Residence Director
B.S., Salem State University; M.A., Boston College

Joseph (Joe) Barbagallo, Assistant Director/Residence Education \& Area Director
B.A., Rhode Island College; M.Ed., Northeastern University

Justin M. Smith, Staff Associate/Assignment \& Housing Operations
Coordinator
David Case, Staff Assistant/Area Director
B.S., Framingham State University

Jaslyne Lemus-Avila, Staff Associate/Residence Director
B.A., Framingham State University

## STUDENT AFFAIRS

Glenn Cochran, Associate Dean of Students for Student Life \& Director of Residence Life \& Housing
B.A., Westfield State College; M.B.A., St. Bonaventure University; Ph.D., University of Massachusetts Amherst

Jason (Jay) Hurtubise, Assistant Dean of Students for Community Standards, Outreach \& Support
B.A., Bryant University; M.Ed., Springfield College

Rachel Lucking, Assistant Dean for Campus Engagement
B.S., Illinois State University; M.A., Boston College

Peter Gillies, Assistant Director/Coordinator of Community Standards \& Student Support
B.M., Michigan State University; M.M., University of Massachusetts Lowell; Ed.D., Nova

Southeastern University; J.D., Massachusetts School of Law
Sarah Ripton, Staff Assistant/Coordinator of Student Support \& Advocacy B.A., University of Rhode Island

## OFFICE OF STUDENT EXPERIENCE AND CAREER DEVELOPMENT

Sara Gallegos, Executive Director
B.A., New Mexico State University; M.Ed., University of South Carolina; Ed.D., Northeastern University
Meghan (Megh) Larkin, Assistant Director/Assistant Director of Orientation \& Student Experience
B.A., Emmanuel College; M.S., University of Rhode Island

Sarah Biggio, Staff Assistant/Coordinator for Internships \& Careers B.A., Loyola University Chicago; M.Ed., Arizona State University

Julia O'Reilly, Staff Assistant/Career Counselor
B.A., University of Delaware; M.S., University of Tennessee Knoxville

Gina Pacitto, Staff Associate/Program Coordinator for Student Experience B.S., Nichols College

Katherine Sieminski, Staff Assistant/Coordinator of Employer \& Academic Outreach
B.A., Pennsylvania State University; M.A., University of Southern California

PUBLIC SAFETY AND POLICE SERVICES
Joseph Cecchi, Chief of University Police
Martin Laughlin, Associate Director/Deputy Chief
Jose Guerrero, Staff Assistant/ID Office Manager

## OFFICE OF VETERANS SERVICES

Christine Denaro, Assistant Director/Veterans \& Military Services Coordinator B.A., Northeastern University; M.A., Adler University

## Division of Student Success

Lorretta Holloway, Vice President for Enrollment \& Student Development B.A., University of Alaska, Fairbanks; M.A., University of Michigan, Ann Arbor; Ph.D., University of Kansas, Lawrence

## THE ACADEMIC ADVISING CENTER

Christopher Gregory, Associate Dean of Academic Affairs and Director of Academic Advising
B.A., Salve Regina University; M.A., Bowling Green State University; Ph.D., St. Louis University

Chad Amidon Mank, Staff Assistant/Academic Advisor \& Athletic Liaison B.A., Framingham State University; M.S., Northeastern University

Veronica LaPlante, Staff Assistant/Academic Advising \& Placement Coordinator
B.A., Bridgewater State University; M.A., Salve Regina University

## CENTER FOR ACADEMIC SUCCESS AND ACHIEVEMENT (CASA)

LaDonna Bridges, Dean of Student Success and Persistence \& Director of CASA
B.S.J., Northwestern University; M.Ed. Springfield College; Ph.D., University of Massachusetts Amherst

Allison (Ally) Chisholm, Associate Director/Associate Director of Academic Success
B.A., Framingham State University; M.Ed., Merrimack College

Tanya Milette, Associate Director/Associate Director of Disability Access Services
B.S., Wheelock College; M.Ed., Boston University

Emily Turcotte, Staff Associate/Academic Success Coordinator for Peer-Led Instruction
B.A., Framingham State University; M.Ed., Regis College

Hannah Wilkins, Staff Associate/Coordinator of Starfish Operations \& Analytics
B.A., Framingham State University

## OFFICE OF FAMIL $Y$ ENGAGEMENT

Benjamin J. Trapanick, Executive Director
B.A., Binghamton University; M.Ed., North Carolina State University

## OFFICE OF INTERNATIONAL PROGRAMS - STUDY ABROAD \& INTERNATIONAL STUDENT AND SCHOLARS

Jane Decatur, Executive Director
B.S.Ed., Miami University; M.S.Ed., Indiana University

Cecilia Reyes Alarcon, Assistant Director
B.A., M.A., University of Oslo

## OFFICE OF DEVELOPMENT AND ALUMNI RELATIONS

Eric Gustafson, Vice President of Development and Alumni Relations
B.A., Marietta College; M.A., University of Massachusetts Amherst; M.A., Anna Maria College

Jennifer DeFronzo, Executive Director for Development \& Alumni Relations B.A., Clark University; J.D., Northeastern University

Michael Antonellis, Associate Director for Development \& Alumni Relations
B.A., Framingham State University

Barry Burlington, Associate Director/Development Officer for Danforth Museum
B.A., Lancaster University; M.Ed., Harvard University

Tom Dennehy, Associate Director/Development Officer
Valerie Grant, Assistant Director/Advancement Services
Tara Stepanian, Assistant Director for Stewardship \& Annual Giving B.A., Westfield State University

## OFFICE OF CAMPUS EVENTS

Autumn Sendzik, Director of Campus Events
B.A., Framingham State University

Susan Romani, Assistant Director of Campus Events B.A., Kent State University; M.B.A., Missouri State University Springfield

## DANFORTH MUSEUM AT FRAMINGHAM STATE UNIVERSITY

Jessica Roscio, Director \& Curator for the Danforth Art Museum B.A., The College of William and Mary; M.A., State University of New York Buffalo; Ph.D., Boston University

Mary Erickson, Assistant Director/Visitor Services Coordinator
Laura Gayton, Assistant Director/Membership Coordinator
Rachel Passannante, Staff Associate/Collections Manager for the Danforth Art Museum
B.A., State University of New York Potsdam; M.A., The University of Sheffield

## Danforth Art School

Noelle Fournier, Director for the Danforth Art School
B.F.A., St. Lawrence University; M.Ed., Lesley University

Katherine Tako-Girard, Staff Assistant/Learning \& Engagement Coordinator
Chandra Taylor, Staff Assistant/Manager for the Danforth Art School
B.A., Wheaton College

## OFFICE OF GRANTS AND SPONSORED PROGRAMS

## Patricia Bossange, Director

B.A., M.A., Boston College

Amy Holland, Staff Associate/Grant Writer
B.A., The George Washington University; M.A., Lesley University

## Faculty

Adelman, Joseph, A.B., Harvard University; M.A., Ph.D., The John Hopkins University; Professor, History

Adelman, Sarah Mulhall, B.A., Xavier University; M.A., Ph.D., The John Hopkins University; Professor, History
Adhibhatta, Santosha L., B., Andhra University, M.S., University of Houston, Ph.D., University of Rhode Island, Assistant Professor, Environment, Society, \& Sustainability

Agartan, Kaan, B.S., Borgazici University; M.A., Ph.D., The State University of New York Binghamton; Associate Professor, Sociology \& Criminology

Alberti, Benjamin, B.A., Ph.D., University of Southampton, U.K.; Professor, Sociology \& Criminology

Alter, Robert, B.V.A., Georgia State University; M.S., Massachusetts Institute of Technology; M.S., Lesley College; Associate Professor, Art

Apostolidis, Emmanouil, B.S., MS., Ph.D., University of Massachusetts Amherst; Associate Professor, Chemistry \& Food Science

Arditte Hall, Kimberly, B.A., Lafayette College; M.S., Ph.D., University of Miami; Assistant Professor, Psychology
Armin, Zahedur, B.S.S., M.S.S., University of Dhaka; M.A., Edinboro University of Pennsylvania; Ph.D., Southern Illinois University; Assistant Professor, Communication, Media, \& Performance

Arpin, Sheree, B.S., University of Rhode Island; Ph.D., University of Arizona; Associate Professor, Mathematics

Atchison, Benjamin, B.A., The College of New Jersey; M.A., The State University of New York, Albany; Associate Professor, Mathematics

Aubry, Luce, B.A., St. Paul Technical College; M.L.A., Harvard University Extension School; Assistant Professor, World Languages

Avard, Rachel., B.A., Assumption College; M.A., M.Phil., Ph.D., Columbia University; Assistant Professor, Biology

Beckwitt, Richard, B.A., University of California, Berkeley; Ph.D., University of Southern California; Professor, Biology

Bell, Dwayne, B.S., California Polytechnic State University; Ph.D., The University of Texas Austin; Assistant Professor, Chemistry \& Food Science

Bennett, Kristen, B.A., Syracuse University, M.Ed., University of Massachusetts Boston, Ph.D., Tufts University; Assistant Professor, English

Bentley, George, B.A., M.A., Ph.D.; University of Connecticut; Assistant Professor, Environment, Society, \& Sustainability
Bihler, Lori, B.A., State University of New York - Binghamton; M.Ed., University of Bristol; Ph.D., University of Sussex; Associate Professor, History

Bishop, Brian, B.A., Memphis College of Art; M.F.A., Cranbrook Academy of Art; Professor, Art

Bollettino, Maria (Lissa), B.A., Brown University; M.A., Ph.D., University of Texas, Austin; Professor, History

Breuning, Cornelia (Conny), B.A., Mt. Holyoke College; M.S.C.I.S., Bentley College; Associate Professor, Computer Science
Brinkman, Bartholomew, B.A., University of Utah; M.A., The John Hopkins University; M.A., University of Illinois Urban-Champagne; Professor, English

Britland, Joanne E., B.A. James Madison University; M.A., Ph.D., Bowling Green State University; Assistant Professor, World Languages

Bruno, Paul, B.A., M.A., Ph.D., Boston College; Professor, Philosophy
Bucci, Bruce, B.A., Rhode Island College; M.S., McDaniel College; Ed.S., Gallaudet University; Assistant Professor, World Languages

Burke, Mary E. (Lisa), B.M., Boston Conservatory; M.A., Ph.D., Brown University; Professor, Music
Caffrey, Mary Catherine, B.A., Boston College; M.F.A., Northwestern University; Professor, Communication, Media, \& Performance
Carroll, Margaret, B.A., Connecticut College; Ph.D., Duke University; Professor, Biology
Cho, Seunghye, B.A., Hansung University; M.A., Hanyang University; M.F.A., University of Oklahoma; Associate Professor, Fashion Design and Retailing

Chon, Kristin A., B.S., Massachusetts Institute of Technology; M.S., University of Massachusetts, Amherst; Assistant Professor, Environment, Society, \& Sustainability
Coelho, Joseph, B.S., M.A., Ph.D., Northeastern University; Associate Professor, Political Science

Cok, Steven, B.S., Michigan State University; Ph.D., The University of Chicago; Associate Professor, Chemistry \& Food Science
Cole, Sarah, B.A., M.A., Kansas State University; Associate Professor, Communication, Media, \& Performance

Cooley, Jean, B.A., Rutgers University; M.S., M.B.A., Northeastern University; Assistant Professor, Accounting, Economics, \& Finance
Cordeiro, Emilce, B.A., M.A., National University of Rio Cuarto; Ph.D., Temple University; Professor, World Languages

Cote, Marc A., B.A., University of the Arts; M.F.A., University of Connecticut; Professor, Art
Coyne, Colleen, B.A., Johns Hopkins University; M.A., University of Chicago; M.F.A., University of Minnesota; Assistant Professor, English

Cressey, James, B.A., Georgetown University; M.Ed., Plymouth State University; Ph.D., University of Massachusetts Amherst; Professor, Education
Crosier, Michael, B.A., B.S., University of Massachusetts Amherst; M.S., Tufts University; Associate Professor, Nutrition \& Health Studies

D’Andrea, Joseph, B.A., College of the Holy Cross; M.A., Ph.D., Boston University; Associate Professor, Philosophy
Davis, Aline, B.S., Worcester Polytechnic Institute; M.S., Ph.D., University of Maryland; Professor, Biology

DeLeon, Jennifer, B.A., Connecticut College; M.F.A., University of Massachusetts Boston; M.A.T., University of San Francisco; Associate Professor, English
Deniz, Borga, Ph.D. Carnegie Mellon University; Associate Professor, Management \& Business and Information Technology

Dignam, Catherine, A.B., Smith College; Ph.D., State University of New York at Stony Brook; Professor, Chemistry \& Food Science
Dinkelacker, Stephen, B.S., M.S., Frostburg State University; Ph.D., Miami University; Professor, Biology

Donnellan, Susan, B.S., M.Ed., Framingham State University; Ed.D., Northeastern University; Associate Professor, Education

Donohue, Robert, B.A., University of Massachusetts - Amherst; M.S., Ph.D., University of Florida; Professor, Psychology
Dowling, Jennifer C., B.A., University of New Hampshire; M.F.A., University of Massachusetts, Dartmouth; Professor, Art

Druffel, Karen, B.A., University of Illinois; M.I.T., Northwestern University; J.D., DePaul University; Associate Professor, Management and Business \& Information Technology

Eck, Elizabeth (Lisa), B.A., Augustana College; M.A., Ph.D., Washington University; Professor, English

Elcoro, Mirari, B.A., Andres Bello University; M.S., Ph.D., West Virginia University; Assistant Professor, Psychology

Faraj, Joycelyn M., B.S., M.S., Ph.D., University of Massachusetts Amherst; Assistant Professor, Nutrition \& Health Studies

Ferraro, Vincent, B.A., University of Connecticut Storrs; M.A., Ph.D., Northeastern University; Associate Professor, Sociology \& Criminology

Flanagan, Anna, B.A., Wellesley College; M.A., Ph.D., University of Denver; Professor, Psychology

Frazier, Chantrell, B.S., Savannah State Univeristy; Ph.D., Florida International University; Assistant Professor, Chemistry \& Food Science

Galvin, Paul, B.A., Hendrix College; M.S., Ph.D., Texas Christian University; Associate Professor, Psychology

Gao, Zhenguang (Jeff), B.A., Beijing Normal University; M.A., Tsinghua University; Ph.D., University of South Carolina; Professor, Computer Science

Gentry, Christian, B.M., University of Utah; M.M., University of Louisville; Ph.D., Brandeis University; Assistant Professor, Music
Gonen, Zeynep, B.S., Middle East Technical University; Ph.D., State University of New York - Binghamton; Assistant Professor, Sociology \& Criminology

Gorman, Andrea, B.S, University of Rhode Island; M.S., University of New Haven; Ph.D., Boston University; Professor, Nutrition \& Health Studies
Gray, Carol J., B.A., Wesleyan University; M.A., Ph.D., University of Connecticut; L.L.M., Georgetown University Law Center; J.D., Northeastern University School of Law; Assistant Professor, Political Science

Greenstein, Michael, B.A., Binghamton University; M.A., Ph.D., Stony Brook University; Assistant Professor, Psychology

Grey, Stephanie, B.F.A., Rhode Island School of Design; M.F.A., Carnegie Mellon University; Associate Professor, Art

Guadalupe-Diaz, Xavier, B.S., M.S., Virginia Commonwealth University; Ph.D., University of Central Florida; Professor, Sociology \& Criminology

Halfond, Gregory, B.A., Cornell University; M.A., Ph.D., University of Minnesota; Professor, History

Hara, May, B.A., Cornell University; M.S., City University of New York; Ph.D., University of Wisconsin - Madison; Professor, Education

Harrison, Michael J., B.S., Central Connecticut State University; M.S., The American College; M.B.A., Colorado State University; D.B.A., Southern New Hampshire University; Professor, Marketing
Hartwiger, Alexander, B.A., M.A., Appalachian State University; Ph.D., University of North Carolina - Greensboro; Professor, English

Horvath, Patricia A., B.S., Emerson College; M.F.A., University of Massachusetts Amherst; Associate Professor, English
Hudock, Laura, B.A., Lafayette College; M.Ed., Ph.D., The Pennsylvania State University; Assistant Professor, Education

Huibregtse, Jon, B.A., M.A., University of Wisconsin - Eau Claire; Ph.D., University of Akron, Professor, History
Johnson, Ann, A.B. Bryn Mawr College; M.B.A., Carnegie Mellen; M.S., Framingham State University; Ph.D., Auburn University; Professor, Nutrition \& Health Studies

Ju, Hae Won, B.S., Yonsei University; M.S., Ph.D., University of Minnesota St. Paul; Associate Professor, Fashion Design \& Retailing
Kali, Audrey, B.A., Chatham College; M.A., Ph.D., University of Pittsburgh; Professor, Communication, Media, \& Performance

Kane, Laura E., B.S., Framingham State University; Ph.D., Oregon State University; Assistant Professor, Fashion Design \& Retailing
Karat, Ella, B.A., University of Connecticut Storrs; M.A., Ph.D., Northeastern University; Assistant Professor, Marketing

Keil, David, B.A., University of Minnesota; M.S., Boston University; Assistant Professor, Computer Science
Knapp, Amy, B.S., University of California - Davis; Ph.D., University of California San Diego; Associate Professor, Biology

Kolodny, Kelly, B.A., Clark University; M.A., Rhode Island College; Ph.D., University of Connecticut; Professor, Education

Krakow, Elizabeth, B.A., Prescott College; M.F.A., Hunter College; Assistant Professor, Art

Krishnamoorthy, Suban G., B.E., Madras University; M. Tech., Indian Institute of Technology Kanpur; M. Comp. Sci., Ph.D., Concordia University, Professor, Computer Science

Krul, Michael, B.S., Fitchburg State University; M.S., Ph.D., University of Rhode Island; Associate Professor, Mathematics
Lambert, Walter, B.S., M.S., University of Rhode Island; Ph.D., University of New Hampshire; Professor, Biology

Lamontagne, Lori, B.A., Lafayette College; M.A., Ph.D., The State University of New York Binghamton; Professor, Accounting, Economics, \& Finance
Latimer, Christopher, Ph.D., University of Albany/SUNY; J.D., American University; Associate Professor, Political Science

Lavigne, Lori B., B.A., Lafayette College; M.A., Ph.D., Binghamton University; Professor, Accounting, Economics, \& Finance
Levandosky, Julie L., B.S., University of Massachusetts - Amherst; Sc.M., Ph.D., Brown University; Professor, Mathematics

Liebert, Aviva E., A.B., Dartmouth College; Ph.D., University of California Los Angeles; Associate Professor, Biology
Lin, Phoebe Sheau (Jen), B.A., University of Michigan; M.A., Ph.D., Wayne State University; Assistant Professor, Psychology

Liu, Rongbing, M.S., The George Washington University; Ph.D., University of Massachusetts Boston; Assistant Professor, Accounting, Economics, \& Finance
Ly, Chu, B.A., Northeastern University; M.Ed., University of Massachusetts Boston; Ed.D., Boston University; Associate Professor, Education

Lynne, Patricia, B.A., Virginia Polytechnic Institute and State University; M.A., George Mason University; Ph.D., University of Wisconsin - Milwaukee; Professor, English
Mabrouk, Sarah, A.B., Wheaton College; M.A., Ph.D., Boston University; Professor, Mathematics

Maibor, Carolyn, B.A. Simmons College; M.A., University of Montreal; Ph.D., Brandeis University; Professor, English
Mannam, Vinay, B.S., Acharya N G Ranga Agricultural University; M.S., Ph.D., University of Tennessee; Assistant Professor, Chemistry \& Food Science

Martin, Jonathan, B.A., Cornell University; M.A., Ph.D., Brandeis University; Professor, Sociology \& Criminology

Massad, Susan, B.S., Framingham State College; M.Ed., Worcester State College; H.S.D., Indiana University at Bloomington; R.D., C.H.E.S.; Professor, Nutrition \& Health Studies

Matthews, Kelly, B.A., Harvard University; M.Phil., Trinity College Dublin; M.A.T., Boston University; Ph.D., University of Ulster; Associate Professor, English
Mayer, Megan, B.S., The George Washington University; M.S., Ph.D., Tufts University; Assistant Professor, Nutrition \& Health Studies

McCarthy, Desmond, B.A., Framingham State College; M.A., Ph.D., Brandeis University; Professor, English
McDonald, Timothy, B.A., University of Rhode Island; M.F.A., East Tennessee State University; Professor, Art

McKenna, Lawrence, S.B., Ph.D., Massachusetts Institute of Technology; Professor, Environment, Society, \& Sustainability
McMakin, Deborah, B.A., Framingham State College; M.A., The George Washington University; M.S.W., Boston University; Professor, Psychology

McQuaid, James, Ph.D., Boston University; Assistant Professor, Sociology \& Criminology
Merwin, David, B.A., University of Nebraska-Lincoln; M.A., Ph.D., University of Connecticut; Professor, Environment, Society, \& Sustainability

Mills-Henry, Ishara, B.S., M.S., Clark Atlanta University; Ph.D., Massachusetts Institute of Technology; Assistant Professor, Biology
Moynihan, Matthew C., B.A., St. Olaf College; Ph.D., Brandeis University; Assistant Professor, Mathematics

Mullaney, Susan, B.S., University of Massachusetts Amherst; M.A., Framingham State College; M.S., University of Massachusetts Worcester; Ed.D., Nova Southeastern University; Professor, Nursing

Ndinguri, Erastus, B.A., University of Nairobi; M.S., Ph.D., Louisiana State University; Associate Professor, Management \& Business and Information Technology

Nelson-Peterman, Jerusha, B.S., Brigham Young University; M.S., University of Utah; Ph.D., Tufts University; Professor, Nutrition \& Health Studies

Noon, Virginia, B.S., Framingham State College; M.S., Kansas State University; Associate Professor, Fashion Design \& Retailing
Nourai, Mehrdad (Mike), Assistant Professor, Computer Science
Obaid, Margaret, B.A., Framingham State University; M.A., Ph.D., Clark University; Assistant Professor, Psychology \& Philosophy

Okoro Totty, Njesa A., B.S., Texas Woman's University; M.S., Ph.D., Oregon State University; Assistant Professor, Mathematics
Osterweis, Laura, B.A., University of Connecticut Storrs; M.F.A., University of Massachusetts Dartmouth; Professor, Art

Otto, Judith, B.A., Williams College; M.A., Harvard University; Ph.D., University of Minnesota; Professor, Environment, Society, \& Sustainability
Page, Jr., Robert, B.S., M.S., Ph.D., University of Mississippi; Professor, Mathematics
Palabiyik, John U., B.S., Istanbul University; M.B.A., DeVry University; Ph.D., Texas Tech University; Assistant Professor, Management \& Business and Information Technology
Papaioannou, Stephan, B.A., Williams College; M.A., Ph.D., University of Maryland College Park; Associate Professor, History

Park Huntington, Yumi, B.F.A., Dong-A University; B.A., Long Island University; M.A., City College of New York; Ph.D., Virginia Commonwealth University; Assistant Professor, Art History

Parker, Lynn, B.A., Providence College; M.A., Ph.D., Brandeis University; Professor, English
Penmatsa, Satish, B.T., Andhra University; M.S., Ph.D., University of Texas San Antonio; Assistant Professor, Computer Science

Perry, Evelyn, B.A., M.A., Simmons College; Ph.D., University of Rhode Island; Professor, English
Peters, Anya; Assistant Professor, Nursing
Pilkenton, Sarah J., B.S., University of Virginia's College at Wise; Ph.D., Purdue University; Professor, Chemistry \& Food Science
Pina, Cara M., B.S., University of Massachusetts Amherst; Ph.D., Brandeis University; Associate Professor, Biology

Powell, Wardell A., B.A., M.S., Lehman College - City University of New York; Ph.D., University of South Florida; Assistant Professor, Education
Prehar, Cynthia A., B.A., University of Texas, Austin; M.S., Ph.D., Colorado State University; Professor, Psychology

Qiu, Honggang, Assistant Professor, Accounting, Economics, \& Finance
Raben, Richard, Assistant Professor, Management \& Business and Information Technology

Rahman, Sandra, B.S., M.B.A., Suffolk University; D.B.A., Nova Southeastern University; Professor, Marketing
Rearick, Ellen, B.S.N., University of Massachusetts Amherst; M.S.N., Ph.D., University of Massachusetts Worcester; Assistant Professor, Nursing

Riveras, Jorge, B.S., Universidad Central de Venezuela; M.B.A., Suffolk University; Ph.D., Southern New Hampshire University; Associate Professor, Management \& Business and Information Technology
Rosero, Luis, B.A., Wheaton College; M.A., Ph.D., University of Massachusetts Amherst; Associate Professor, Accounting, Economics, \& Finance

Rossi, Nicole, B.A., Mount Holyoke College; M.A., Brandeis University; M.A., Ph.D., University of New Hampshire; Professor, Psychology
Sachs, Charles, B.A., The State University of New York, M.A., M.S., M.Phil., Ph.D., Columbia University; Associate Professor, Psychology

Salmassi, Mohammad, B.S., University of Tehran; M.S. Rensselaer Polytechnic Institute; M.S., Ph.D., University of Kentucky; Professor, Mathematics
Sanchez-Connally, Patricia, B.A., Framingham State College; M.A., Ph.D., University of Massachusetts Boston; Assistant Professor, Sociology \& Criminology
Schneider, Erica., B.A., Mount Holyoke College; M.A., Boston University; Professor, Art History
Sedlock, Nicholas, B.S., Carnegie Mellon University; M.S.T., Boston University; M.A., Ph.D., Washington University, St. Louis; Associate Professor, Mathematics

Shafto Sally, B.A., Skidmore College; M.A., Columbia University; Ph.D., University of Iowa; Assistant Professor, English
Silver, Ira, B.A., Amherst College; M.A., Ph.D., Northwestern University; Professor, Sociology \& Criminology

Simons Amanda, B.S., University of Delaware; Ph.D., Harvard University; Associate Professor, Biology
Singh, Vandana, B.Sc., M.Sc., Delhi University; Ph.D., Louisiana State University; Professor, Environment, Society, \& Sustainability
Sjuib, Fahlino, B.S., Parahyangan Catholic University; M.A., Western Illinois University; Ph.D., Kansas State University; Professor, Accounting, Economics, \& Finance

Smailes, David A., B.A., College of Wooster; Ph.D., University of Massachusetts Amherst; Associate Professor, Political Science
Solomon, Folashade (Shade), B.A., University of Massachusetts Boston; M.S., Wheelock College; M.Ed., Ed.D., Harvard University; Assistant Professor, Education
Souza, Brian, B.S., M.S., Springfield College; Ph.D., Oregon State University; Assistant Professor, Nutrition \& Health Studies

Stamatopoulou, Argyroula, B.S., University of Massachusetts - Boston; Ph.D., Purdue University; Assistant Professor, Chemistry \& Food Science

Staniszewski, Christopher, B.A., M.S., Ph.D., University of Rhode Island; Assistant Professor, Mathematics

Stephens, Niall, B.A., University College Dublin; Ph.D., University of Massachusetts Amherst; Associate Professor, Communication, Media, \& Performance

Straka, Keri, B.F.A., Western Washington University; M.F.A., Massachusetts College of Art; Professor, Art

Thomas, Lisa J., B.S.N., University of Massachusetts Lowell; M.S.N., Northeastern University; Ph.D., University of Massachusetts Dartmouth; Associate Professor, Nursing

Tohidinia, Zahra, Assistant Professor, Marketing
Trousdale, Rachel, B.A., M.A., Ph.D., Yale University; Professor, English
Van Roo, Brandi, B.A., State University of New York, Fredonia; B.S., State University of New York, Syracuse; Ph.D., Indiana University, Bloomington; Professor, Biology

Vreven, Dawn, B.S., Michigan State University; M.A., Central Michigan University; Ph.D., Brown University; Professor, Psychology

Waetzig, Shelli, B.S., Creighton University; Ph.D., The University of Kansas; Associate Professor, Chemistry \& Food Science

Whalley, Elizabeth, B.A., Ithaca College; Ph.D., University of Colorado Boulder; Assistant Professor, Sociology \& Criminology

White, Jeffrey, B.S., St. Michael's College; M.S., Ph.D., Michigan State University; Associate Professor, Biology

Wickham, Catherine A., B.S., Bentley University; M.S., University of Saint Joseph; Ph.D., University of Massachusetts Amherst; Assistant Professor, Food \& Nutrition

Witt, Samuel, B.A., University of Virginia; M.F.A., University of Iowa; Associate Professor, English

Wu, Cheng-Chaing, B.S., M.S., National Taiwan University; Ph.D., Harvard University; Assistant Professor, Biology

Yalowitz, Paul, B.F.A., School of Visual Arts; M.F.A., University of Hartford; Associate Professor, Art
Yeh, YaYing (Mary) C., Professor, Accounting, Economics, \& Finance
Yoon, Sae Young, Assistant Professor, Accounting, Economics, \& Finance
Zhang, Ruirui, B.E., Beijin College of Fashion Design and Technology; M.S., Ph.D., Oregon State University; Assistant Professor, Fashion Design and Retailing
Zoino-Jeannetti, Julia A., B.A., Wellesley College; M.Ed., Ph.D., Boston College; Associate Professor, Education

## Administrators Emeriti

Heineman, Helen L.

President, Emerita
English Professor, Emerita

## Weller, Paul F.

President, Emeritus

Boyd, Lawrence
Director of Athletics, Emeritus
Calapa, Joseph
Director of Financial Services, Emeritus

Dooher, Philip M.
Vice President for Enrollment
Management, Emeritus
Donovan, Danielle
Assistant Dean, Graduate Admissions, Emerita
Flinter, Martha
Director of International/Study Abroad Programs, Emerita
Forrest, Cynthia Smith
Dean of Student Services, Emerita
Good, Arnold
Associate Dean, Graduate \&
Continuing Education, Emeritus
Gordon, Joy
Staff Associate, Museum Director, Emerita

Greenberg, Scott
Associate Provost, Emeritus
Griffin, Raymond
Director of McAuliffe Center, Emeritus

## Hawk, Rebecca

Director of English Language Learner Programs, Emerita
Hofrenning, Ilene
Director of Health Services, Emerita

## Irwin, L. William

Assistant Dean, Continuing Education, Emeritus

Margulies-Ellias, Marie
Director of Counseling Center, Emerita
Marsh, Robert
Assistant to the President, Emeritus
Medeiros, Bradford
Chief of Public Safety \& Police
Services, Emeritus
Mitchell, Bonnie
Dean of the Library, Emerita
Najjar, Yaser
Dean of Graduate Studies \& Continuing
Education, Emeritus
Noyes, Wendy
Vice President for Student Services, Emerita
Roe Bergeron, Carol
Assistant Dean of Admissions, Emerita
Ross, Dawn
Director of Career Services \&
Employer Relations, Emerita
Storch, Margaret
University Advancement, Emerita
Tatro, Robert
Director of Power Plant \& Support
Services, Emeritus
Welch, Paul
Director of the Counseling Center, Emeritus

## Faculty Emeriti

Abdelgadir, Osama
Geography
Associate Professor, Emeritus
Allen, Malwina
Chemistry
Professor, Emerita
Allen, Richard
History
Professor, Emeritus
Ambacher, John
Government
Professor, Emeritus
Anderson, John
Art
Professor, Emeritus
Anderson, Thomas
Economics \& Business Administration Assistant Professor, Emeritus

Anes, Jean
Chemistry \& Food Science
Associate Professor, Emerita

## Austin, Sandra

Nursing
Associate Professor, Emerita

## Barklow, William

Biology
Professor, Emeritus
Barron, Gloria
History
Professor, Emerita
Bechtel, Cynthia
Nursing
Professor, Emerita

## Beck, Charles

Education
Professor, Emeritus

## Beck, Robert

Chemistry \& Food Science
Professor, Emeritus

## Beck, Sachiko

Art
Professor, Emerita
Beilen, Elaine
English
Professor, Emerita

## Beyer, Kathleen

English
Associate Professor, Emerita
Birmingham, Doris A.
Art History
Associate Professor, Emerita

Bond, Mary
Education
Assistant Professor, Emerita
Bowden, Nancy
Family and Consumer Sciences
Professor, Emerita
Bown, Fred
Mathematics
Professor, Emeritus
Burns, Mary M.
Senior Librarian, Emerita
Buydoso, Cathleen
Education
Professor, Emerita

## Carter, Mary

Education
Professor, Emerita
Caruso, Joseph J.
Education
Professor, Emeritus
Cohen, Marian A.
Sociology
Professor, Emerita
Conrad, Susan
Nursing
Professor, Emerita
Cotter, Paul
Biology
Professor, Emeritus
Cunningham, Malcolm A.
Modern Languages
Professor, Emeritus
Daly, Patricia
Family \& Consumer Sciences
Professor, Emerita
Davis, John
Communication Arts
Professor, Emeritus
Donnell, Robert P.
Geography
Professor, Emeritus
Doyle-Burke, Christine
Economics \& Business Administration
Professor, Emerita
Dunne, Maureen E.
Economics \& Business Administration
Professor, Emerita
Eames, Thomas
Chemistry
Professor, Emeritus

Eng, James
Art
Professor, Emeritus
Feldman, Alan
English
Professor, Emeritus
Fiandaca, Frederick
Art
Assistant Professor, Emeritus
Fiore, Stephen
Music
Associate Professor, Emeritus
Freedman, Shin
Librarian, Emerita
Flynn, Judith
Consumer Sciences
Professor, Emerita
Flynn, Leonard
Psychology
Professor, Emeritus
Galvin, T. Bridgett Perry
Psychology
Professor, Emerita

## Gawne, Eleanor

Home Economics
Professor, Emerita
Graham, Claire
Education
Professor, Emerita
Grassetti, Mary
Education
Professor, Emerita
Grove, Thomas
English
Professor, Emeritus
Haggerty, Joyce
Modern Languages
Professor, Emerita
Hakansson, Carl
Geography
Professor, Emeritus
Haley, Mary
Nursing
Professor, Emerita
Handschuch, Arlene
Fashion Design \& Retailing
Professor, Emerita
Harrington, Joseph
History
Professor, Emeritus
Harter, Marilyn
English
Assistant Professor, Emerita

## Horn, Bernard

English
Professor, Emeritus

## Husband, Jonathan

Technical Services Librarian, Emeritus
Irwin, Regina
Family and Consumer Sciences
Assistant Professor, Emerita
Jarnis, George
Political Science
Professor, Emeritus
Johnson Jr, Robert
Communication, Media, \& Performance
Professor, Emeritus
Jurich, Joseph
English
Associate Professor, Emeritus

## Keiss, Harold O.

Psychology
Professor, Emeritus
Klar, Walter
Education
Professor, Emeritus
Klein, Ronnie
Assistant Librarian, Emerita
Koshy, Thomas
Mathematics
Professor, Emeritus
Krier, Donald
Economics \& Business Administration
Professor, Emeritus

## Krier, Maureen

Acquisitions/Serials Librarian, Emerita
Lazarus, Joyce Block
Modern Languages
Professor, Emerita
Levine, Miriam
English
Professor, Emerita
Low, Lorraine
Psychology
Professor, Emerita
Lowe, Diane
Education
Professor, Emerita
Ludemann, Pamela M.
Psychology
Professor, Emerita
Luoto, Patricia
Food \& Nutrition
Professor, Emerita

## Mahan, Elizabeth

Education
Professor, Emerita
McKinney, Marie
Economics \& Business Administration Professor, Emerita
McNamara, Catherine F.
Home Economics
Assistant Professor, Emerita
Milaszewski, Richard
Chemistry \& Food Science
Professor, Emeritus
Milot, Barbara Curtin
Art
Professor, Emerita
Momen, Abdul
Economics \& Business Administration Professor, Emeritus
Muller, Eugene
Biology
Professor, Emeritus
Murray, John
Physics
Professor, Emeritus
Neubauer, Suzanne H.
Food \& Nutrition
Professor, Emerita
Nolletti, Arthur
English
Professor, Emeritus
Nutting, P. Bradley
History
Professor, Emeritus
O’Connor, Mary Lou
Home Economics
Professor, Emerita
Peterson, Paul
Physics
Professor, Emeritus
Phillips, Sarah
Special Collections Librarian, Emerita
Previte, Joseph J.
Biology
Professor, Emeritus
Racheotes, Nicholas
History
Professor, Emeritus
Reiter, Josephine
Music
Professor, Emerita
Roberts, Roberta A.
History
Professor, Emerita

Robinson-Pratt, Edna<br>Mathematics, Education<br>Assistant Professor, Emerita

Rosenbaum, Peter
Computer Science
Professor, Emeritus
Rosman, Bernard
Computer Science
Professor, Emeritus
Rutter, Virginia
Sociology
Professor, Emerita
Rust, William
Politics
Professor, Emeritus
Ryan, Peter
Economics \& Business Administration
Associate Professor, Emeritus

## Sandberg, Sandra

Mathematics
Professor, Emerita
Schwartz, Janet
Food \& Nutrition
Professor, Emerita

## Sebor-Cable, Pamela

Fashion Design \& Retailing
Associate Professor, Emerita
Seiden, Mark
English
Professor, Emeritus
Senders, Virginia
Psychology
Professor, Emerita
Sheridan, Bridgette
History
Professor, Emerita
Signes, Richard J.
Modern Languages
Associate Professor, Emeritus
Simonson, Larry A.
Chemistry
Professor, Emeritus
Slack. Marion
Associate Librarian, Emerita
Snyder, Benjamin
Biology
Professor, Emeritus
Springer, Claudia
English
Professor, Emerita
Stannard, Katherine M.
Psychology
Professor, Emerita

## Stanton, Philip B.

Biology
Professor, Emeritus
Stadtler-Chester, Mary-Ann
World Languages
Professor, Emerita
Starobin, Leslie Ann
Communication Arts
Professor, Emerita
Storella, Elaine
History, Government
Professor, Emerita
Sullivan, Eugene E.
Art
Professor, Emeritus
TePaske, Derrick
Communication Arts
Professor, Emeritus
Tischler, Henry
Sociology
Professor, Emeritus
Torti, Dolores
Nursing
Professor, Emerita
Wallace, Robert
Economics \& Business Administration Professor, Emeritus

Whitburn, Kevin<br>Chemistry<br>Professor, Emeritus<br>White, Michael<br>Geography<br>Associate Professor, Emeritus<br>Whitman, Betsey<br>Mathematics<br>Professor, Emerita<br>Wilton, Miriam<br>Psychology<br>Professor, Emerita<br>Wong-Russell, Michael<br>World Languages<br>Professor, Emeritus<br>Wyeth, John<br>Library Assistant, Emeritus<br>Ziegelman, Lois<br>English<br>Professor, Emerita<br>Zimmerman, Ellen<br>Sociology<br>Professor, Emerita

## Campus Buildings and Facilities

Athletic and Recreation Center, opened in 2001, houses a gymnasium, locker rooms, athletic training rooms and offices, the bookstore, and an aerobics fitness center.

Crocker Hall is named for Lucretia Crocker, an outstanding teacher and the first woman to be appointed supervisor in the Boston schools. It is currently used for faculty offices.

Arthur M. Doyle Information Technology Center, named for the late Vice President for Academic Affairs, is located adjacent to Whittemore Library and houses the offices of Information Technology Services.

Dwight Hall, named for industrialist Edmund Dwight of Boston, who provided funds for Horace Mann to start the Normal Schools of Massachusetts, houses classrooms, main administrative offices, and an auditorium.

Foster Hall is named for Dr. Stuart Foster, former Chair of the Chemistry Department and Professor Emeritus. The building serves as the Health \& Wellness Center and houses Health Services.

Helen L. Heineman Center, built in 1871, was purchased by the institution in 1970 and used as a chapel for all faiths and as a classroom. Renovated in 2000, the facility also now serves as the site for special campus events.

Corinne Hall Towers, a four-house residence complex, accommodates students in 32 suites of 13 students per suite. It is named in honor of Corinne Hall, a former home economics teacher at the institution. The residence opened in September 1973.

Hemenway Hall Complex, named for Mary Hemenway, who was largely responsible for the development of the consumer sciences division of the institution, houses the departments of Biology, Chemistry \& Food Science, Computer Science, Nutrition \& Health Studies, Environment, Society, \& Sustainability, and Mathematics. It is also home to state-of-the-art science laboratories along with general purpose classrooms including three amphitheaters.

Horace Mann Hall is a coed residence housing juniors and seniors in single rooms. It is named for the famous educator who was the founder of the Commonwealth's first teacher training institution.

Jonathan Maynard Building, named for Framingham's most prominent citizen during the period between the Revolutionary War and the arrival of the railroad, houses Studio Art classrooms on the ground floor and is permanent location of the Danforth Art Museum on the main floor and Danforth Art School on the upper floor.

Larned Hall is named for Dorothy Larned, who served as the Dean of Women from 1942 to 1961. The six-story residence hall provides living and study facilities for men and women. The ground floor contains a large recreation room with lounge, kitchenette, and meeting rooms for educational and social functions. Other floors contain living quarters, together with study and utility areas. Situated atop Bare Hill, the residence hall is surrounded by an exterior plaza providing an overall view of the campus.

Linsley Hall, named for the late Professor James D. Linsley of the History Department, is a threestoried, three-winged, coed residence hall located at the foot of Adams Road. Linsley offers traditional single and double occupancy rooms, as well as six- and eight- person suites.

May Hall, is named for Abby May, the Official Visitor to the Framingham Normal School for the Massachusetts Board of Education. In her reports to the legislature, she advocated for this classroom-administrative building which opened in 1889, the year after her death. It was completely renovated in 1982 and houses the departments of Art, English, and History.
D. Justin McCarthy Campus Center, named in honor of Dr. McCarthy, President of the University from 1961 to 1985, houses all segments of student activities. Since the building's opening in 1976, The D. Justin McCarthy Center has been the hub of all of the University student activities. In May 2005, the McCarthy Center main entrance was redesigned and all interior spaces have undergone extensive renovations. The McCarthy Campus Center contains the Office of the Dean of Students along with various Student Affairs offices; the Student Services Center (SSC) comprised of the offices of Financial Aid, Student Accounts, and University Registrar; the Office of University Police; the Mazmanian Art Gallery; the Dining Commons; a Cyber Café; a student game room, classrooms; and other meeting rooms.

Miles Bibb Hall, named for Mary E. Miles Bibb, the first African American graduate of the then Framingham Normal School (Class of 1843), opened in Fall 2011 and is home to approximately 410 upper-class students in four-person suites or in connected doubles and singles sharing semiprivate bathroom facilities. The hall's 'backyard' is a popular space to see students enjoying a pickup basketball game or throwing a frisbee with friends. Miles Bibb Hall also houses Sandella's Flatbread Cafe, offering freshly made sandwiches and salads, grab-and-go dining options, and convenience items.

O’Connor Hall, named for Martin F. O’Connor, who served as President from 1936 to 1961, was a residence until Fall 2016. O'Connor Hall now serves as the of several academic departments along with various administration offices. It is also the home of the Christa Corrigan McAuliffe Center for Education and Teaching Excellence and the Challenger Learning Center.

Peirce Hall, named for Cyrus Peirce, who was the first President of the University, is a residence for 102 women students. South Peirce houses academic administrators' offices and the Center for Academic Success and Achievement.

Warren Center, acquired in 2016, is a professional event center and inn 10 minutes from campus, providing a training ground and real-world experience to students. The Warren Conference Center hosts corporate events, weddings, and other social gatherings in a first-rate facility located on a beautiful 65-acre property.

West Hall, opened Fall 2016, is the newest residence hall with approximately 315 residents. The majority of rooms are connected double-double bedroom units with a private bath. There are also connected single-single bedroom units with a private bathroom. The first floor boasts a game room and the main lounge includes a fireplace and kitchen area for building use. The top floor includes a large media room lounge with tall floor-to-ceiling glass exterior walls. There are also lounges on each floor featuring common seating areas, TVs, and enclosed study lounges.
Henry Whittemore Library, named for the President of the institution who served from 1898 to 1917, is a seven-level structure completed in 1969. Its collections presently include approximately 200,000 book volumes, and access to over 70,000 electronic journals. An on-line public catalog combines the holdings of the Library and the Minuteman Library Network. These resources are supplemented by on-line computer systems for information retrieval, including Internet access to data-bases world-wide. Curriculum Library, Archives, and Special Collections rooms contain many materials unique to the University. Classrooms, the Emeritus Room, the Copy Center, along with the departments of Communication Arts and World Languages are also located in the building.

## The Christa Corrigan McAuliffe Center for Education and Excellence

As teacher, Mission Specialist, and Framingham State University alumna, Christa Corrigan McAuliffe has inspired both students and educators for nearly two decades. The McAuliffe Center was established to honor her commitment to education by providing exciting, standards-based programs in the pursuit of excellence. The Challenger Learning Center is the McAuliffe Center's best-known program. In full-size mockups of both Houston's Mission Control and a space station interior, middle-school students apply the principles of physical science to the real-time challenges of a simulated space flight. Adjacent to the Center is the Framingham State University Planetarium. The thirty-foot dome brings the majesty of the universe down to Earth, with original programming from the McAuliffe Center that combines state-of-the-art technology with current educational philosophy.

In partnership with the Science Education Department of the Harvard-Smithsonian Center for Astrophysics, the McAuliffe Center brings the ARIES hands-on astronomy curriculum to teachers across the United States.
The McAuliffe Center's relationship with NASA gives teachers throughout New England access to the agencies numerous space-related programs, including Mission Mathematics and Liftoff to Learning. Building a Presence for Science, a National Science Teachers Association program in which more than 150 Massachusetts science teachers facilitate the integration of science education standards into classrooms statewide, is yet another example of the Center's collaborative efforts. The McAuliffe Center is located on the FSU campus in O'Connor Hall. Call 508-626-4050, or visit the website at www.christa.org, for more information.

## 2024-2025 ACADEMIC CALENDAR <br> (As Approved thru Governance)

## FIRST SEMESTER - FALL 2024

| Last Day to Make up an Incomplete from Spring 2024 |  | Sep 01 |
| :--- | :--- | :--- |
| Labor Day Observed (No Classes) | Mon | Sep 02 |
| Student Teaching Orientation (Scheduled by Education Department) | Tue | Sep 03 |
| Classes \& Student Teaching Begin | Wed | Sep 04 |
| Last Day to Add/Drop a Semester Course | Mon | Sep 11 |
| Last Day to Make up an Incomplete from Summer 2024 |  | Oct 01 |
| Columbus Day/Indigenous Peoples Day Observed (No Day Division Classes) | Mon | Oct 12 |
| Veterans Day Observed (No Day Division Classes) | Mon | Nov 11 |
| Last Day to Take as Credit/No Credit | Fri | Nov 29 |
| Last Day to Withdraw from a Semester Course with a 'W' | Fri | Nov 29 |
| November Recess (Begins @ 4:30pm on Wed, Nov 22) | Thu, Fri | Nov 28,29 |
| Semester Classes End | Wed | Dec 11 |
| Reading Day (No Day Division Classes) | Thu | Dec 12 |
| Final Exam Period | Fri, | Dec 13, |
| Examination Snow Day | Mon-Thu | $16-19$ |
| End of First Semester | Fri | Dec 20 |

SECOND SEMESTER - SPRING 2025:

| Advising; Registration; Orientation (New Students Only) | Thu | Jan 16 |
| :--- | :--- | :--- |
| Student Teaching Orientation (Scheduled by Education Department) | Fri | Jan 17 |
| Martin Luther King Day Observed (No Classes) | Mon | Jan 20 |
| Classes \& Student Teaching Begin | Tue | Jan 21 |
| Last Day to Add/Drop a Semester Course | Tue | Jan 28 |
| Presidents' Day (No Day Division Classes) | Mon | Feb 17 |
| Spring Vacation (After Day Division Classes) | Fri | Mar 14 |
| Last Day to Make up an Incomplete from Fall 2024 \& Wintersession 2025 |  | Mar 22 |
| Classes Resume | Mon | Mar 24 |
| Patriots' Day (No Day Division Classes) | Mon | Apr 11 |
| Last Day to Take as Credit/No Credit | Fri | Apr 25 |
| Last Day to Withdraw from a Semester Course with a 'W' | Fri | Apr 25 |
| Semester Classes End | Fri | May 09 |
| Final Exam Period | Mon-Fri | May 12-16 |
| End of Second Semester | Fri | May 16 |
| Spring Commencement | Sat | May 24 |
| Orientations for New Transfer Students | Wed | May 28 |


[^0]:    'GI Bill $\mathbb{R}$ is a registered trademark of the United States Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official United States Government Web site at http://www.benefits.va.gov/gibill."

[^1]:    ' 'GI Bill $\mathbb{R}$ is a registered trademark of the United States Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official United States Government Web site at http://www.benefits.va.gov/gibill."

[^2]:    Recommended courses:
    ANTH 161 Cultural Anthropology
    CRIM 201 White Collar Crime
    CRIM 218 Crime Mapping
    SOCI 203 Introduction to Critical Race Theory
    SOCI 210 Latinxs in the United States
    SOCI 213 Social Class
    SOCI 218 Women in Society
    SOCI 230 Law and Society

