2022–2023

Catalog

FRANKLIN & MARSHALL COLLEGE

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Office of Student Affairs	(717) 358-4000
Office of Financial Aid	(717) 358-3991
Office of the President	(717) 358-3971
Office of the Provost & Dean of the Faculty	(717) 358-3986
Office of the Registrar	(717) 358-4168
Office of Student Accessibility Services	(717) 358-3989

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Franklin & Marshall College
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Lancaster, PA 17604-3003
(717) 358-3911

College website: www.fandm.edu

For questions about the admission process

call: (717) 358-3951 email: admission@fandm.edu

STATEMENT ON NONDISCRIMINATION

Franklin & Marshall College is committed to having an inclusive campus community where all members are treated with dignity and respect. As an Equal Opportunity Employer, the College does not discriminate in its hiring or employment practices on the basis of gender/gender-identity, sex, race or ethnicity, color, national origin, religion, age, disability, veteran's status, genetic information, family or marital status, sexual orientation, or any other protected class. The College does not discriminate on the basis of gender, sex, race or ethnicity, color, national origin, religion, age, disability, veteran's status, family or marital status, sexual orientation, or other protected class in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other College-administered programs.

Franklin & Marshall College reserves the right to amend any administrative, academic or disciplinary policy or regulation described in this Catalog, without prior notice to persons who might thereby be affected. Information about expenses, fees and other charges applies to the academic year 2022 – 2023. All fees and other charges are subject to change. The provisions of the Catalog are not to be regarded as an irrevocable contract between the College and the student or between the College and the parents of the student. Insofar as possible, the information in this book is complete and accurate as of the date of publication.

Franklin & Marshall College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools.

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Franklin & Marshall College

2022–2023 CATALOG

THE MISSION
OF FRANKLIN & MARSHALL COLLEGE

Franklin & Marshall College is a residential college dedicated to excellence in undergraduate liberal education. Its aims are to inspire in young people of high promise and diverse backgrounds a genuine and enduring love for learning, to teach them to read, write and think critically, to instill in them the capacity for both independent and collaborative action, and to educate them to explore and understand the natural, social and cultural worlds in which they live. In so doing, the College seeks to foster in its students qualities of intellect, creativity and character, that they may live fulfilling lives and contribute meaningfully to their occupations, their communities, and their world.

THE HISTORY
OF FRANKLIN & MARSHALL COLLEGE

Franklin & Marshall College is one of the oldest institutions of higher learning in the United States. Its roots go back to Franklin College, founded in 1787 with a generous financial contribution from Benjamin Franklin. The product of a pioneering collaboration between English- and German-speaking communities in the most ethnically diverse region of the new nation, the College was launched by leaders of the Lutheran and Reformed Churches with support from trustees that included four signers of the Declaration of Independence, three future governors of Pennsylvania, two members of the Constitutional Convention and seven officers of the Revolutionary Army. Their goal was "to preserve our present republican system of government," and "to promote those improvements in the arts and sciences which alone render nations respectable, great and happy."

Marshall College, named after the great Supreme Court Chief Justice John Marshall, was founded in 1836 in Mercersburg, Pennsylvania under the sponsorship of the German Reformed Church. It attracted a distinguished faculty that became nationally known as leaders of an intellectual movement known as the Mercersburg Theology. In 1853 Marshall College moved to Lancaster and merged with Franklin College to form Franklin & Marshall College. James Buchanan, fifteenth President of the United States, was the first President of the Board of Trustees. From the time of its centennial, the College complemented its strengths in the classics and philosophy with a widely respected program in science. Then, in the 1920s, it added a program in business. The College's transformation continued after World War II with gradual expansion in size and academic scope. Increasingly, students and faculty were drawn from all regions of the nation and the world. Campus facilities expanded and the College became primarily residential. It became coeducational in 1969. The connection to the Reformed Church, later part of the United Church of Christ, was severed and the College became a secular institution. Throughout all of these changes, however, the College remained committed to "liberal learning." Frederick Rauch, the first president of Marshall College, had proclaimed in 1837, "The fortune of our lives and our government depends not exclusively on useful knowledge but on our character as citizens, and to form this character by cultivating the whole [person] is the aim of education in the proper sense."

Today, with approximately 2,400 students, Franklin & Marshall College proudly continues its dedication to intellectual freedom and critical learning as fundamental to a democratic society. As its mission statement affirms, this means that it expects students to see connections, to discover community and to understand the centrality of service to the human endeavor.

THE INTEGRATION
OF ACADEMIC & RESIDENTIAL LEARNING

Franklin & Marshall College offers an integrated learning environment where students engage the values of the liberal arts both through the curriculum and in their lives outside the formal classroom. Consistent with the Mission Statement of the College, faculty and administrative offices place student learning at the center of their work. Programs and activities guide and support students as they explore a love of learning, the skills of critical thinking, the role of citizenship in their lives and the values of civility. The College challenges students to make the most of the academic program and other educational opportunities offered by this residential campus, to practice mental and physical wellness and to develop their talents and interests as part of an educated and socially responsible community.

The faculty-led College House system is the keystone of Franklin & Marshall's vision for integrating academic and residential life. While a College House is in a literal sense a student residence, it is more than this. College Houses are led by senior members of the Faculty, the Dons, and by their colleagues, the College House Deans, experienced academic and student life professionals. The Houses foster an environment that infuses student life with thoughtful deliberation and intellectual exploration, habits of thought and analysis that will serve students throughout their personal and professional lives. The Houses are the meeting ground where students can interact and network among the extended College family. Together, Faculty Dons, College House Deans and students create events that bring faculty, students, alumni/ae, distinguished visitors and professional staff together in formal and informal settings to engage in lively discussions and social interactions that break the barrier between classroom and student residence.

Upon matriculation, all students are assigned to membership in a College House. Although students are not required to live in the House for all four years, this affiliation continues through the entire Franklin & Marshall experience and extends beyond graduation. Most students enter the House System as a member of a residential Connections seminar. These courses introduce students to skills of critical reading, critical thinking, written and oral communication and information literacy. At the same time, the students live together in the same area of the College House making it possible for discussions of substance about ideas to move easily between the classroom and the residential environment.

Within Houses, students elect leaders, craft and enforce standards of behavior, manage their own social programs and resolve the problems of living that arise among House residents. The governing structure of each House is based on the explicit acknowledgement that students are adults and should control many aspects of their social and residential life. College Houses are therefore also places where the arts of democracy are learned and leadership is incubated.

College Houses express the ethos of the College. College Houses are connected communities where all students can find a place. Creating an environment that is neither exclusively academic nor residential, the House environment is sometimes called a "third space," a comfortable and inviting hybrid of classroom and residence hall that exceeds its individual parts. The College Houses model a way of living that makes for a rewarding life: they support a social landscape that integrates work, play, a critical approach to new ideas and the belief that every moment holds the opportunity for discovery and personal satisfaction.

This emphasis on integrating ideas and residential life informs many other areas of the student experience. Both academic and career advising ask students to think about the value of a liberal arts education and the connections among the liberal arts and the world of work. Social and co-curricular programming emphasizes student initiative in planning and organizing events. Students are encouraged to see themselves as citizens informed by an entrepreneurial spirit. The College also provides opportunities for students to explore the meaning of faith, religion and spirituality. Because of its commitment to educating the whole person, the College has a number of programs that emphasize health and wellness, including personal counseling, programs in the residence halls, varsity and intramural sports and workshops on health issues.

In March 2009, the faculty voted to implement a Common Hour, a weekly time during which no classes are scheduled, to enable the entire College community to gather for special events. This common gathering time, used for lectures, topical discussions, projects and other community gatherings since Spring 2010, was designed to promote the involvement of all members of the College in meaningful intellectual exchange and to broaden the reach of the liberal arts experience.

Academic Calendar

Fall Semester 2022

August	**23–26**	Tuesday–Friday	International Student Orientation
August	**27**	Saturday	College Houses open for First Year Students, 8:30 a.m.
August	**27–30**	Saturday–Tuesday	New Student Orientation
August	**28–30**	Sunday–Tuesday	College Houses & Theme Houses open for Upper Class Students, 9 a.m. – 4 p.m.
August	**30**	Tuesday	Convocation, 10 a.m.
August	**31**	Wednesday	Degree conferral date for summer graduates
August	**31**	Wednesday	Fall semester classes begin, 8 a.m.
September	**5**	Monday	Labor Day (classes in session; administrative offices closed for federal holiday)
October	**7**	Friday	Fall break begins, 4:30 p.m.
October	**12**	Wednesday	Fall break ends, 8 a.m.
October	**21–23**	Friday–Sunday	True Blue Weekend
November	**22**	Tuesday	Thanksgiving recess begins, 6:05 p.m.
November	**28**	Monday	Thanksgiving recess ends, 8 a.m.
December	**9**	Friday	Fall semester classes end, 4:30 p.m.
December	**10–13**	Saturday–Tuesday	Reading days
December	**13**	Tuesday	Winter Graduates Recognition Ceremony
December	**14**	Wednesday	Final examinations begin
December	**18**	Sunday	Final examinations end; Winter recess begins
December	**19**	Monday	College Houses & Theme Houses close; 11 a.m.

The College notes that a number of religious holidays occur during the semester.
Please consult the College web-based calendar for these dates: http://www.fandm.edu/calendar.

Academic Calendar

Spring Semester 2023

January	**15**	Sunday	College Houses & Theme Houses open, 8:30 a.m.
January	**16**	Monday	Martin Luther King Day (offices open)
January	**17**	Tuesday	Spring semester classes begin, 8 a.m.
January	**31**	Tuesday	Degree conferral date for fall and winter graduates
March	**10**	Friday	Spring recess begins, 4:30 p.m.
March	**20**	Monday	Spring recess ends, 8 a.m.
April	**27**	Thursday	Spring semester classes end, 6:05 p.m.
April-May	**28–1**	Friday–Monday	Reading days
May	**2**	Tuesday	Final examinations begin
May	**6**	Saturday	Final examinations end
May	**7**	Sunday	College Houses & Theme Houses close, 11 a.m.
May	**13**	Saturday	Commencement

The College notes that a number of religious holidays occur during the semester.
Please consult the College web-based calendar for these dates: http://www.fandm.edu/calendar.

Academic Calendar

Fall Semester 2023

August	**22–25**	Tuesday–Friday	International Student Orientation
August	**26**	Saturday	College Houses open for First Year Students, 8:30 a.m.
August	**26–29**	Saturday–Tuesday	New Student Orientation
August	**27–29**	Sunday–Tuesday	College Houses & Theme Houses open for Upper Class Students, 9 a.m. – 4 p.m.
August	**29**	Tuesday	Convocation, 10 a.m.
August	**30**	Wednesday	Fall semester classes begin, 8 a.m.
August	**31**	Thursday	Degree conferral date for summer graduates
September	**4**	Monday	Labor Day (classes in session; administrative offices closed for federal holiday)
October	**6**	Friday	Fall break begins, 4:30 p.m.
October	**11**	Wednesday	Fall break ends, 8 a.m.
October	**27–29**	Friday–Sunday	True Blue Weekend
November	**21**	Tuesday	Thanksgiving recess begins, 6:05 p.m.
November	**27**	Monday	Thanksgiving recess ends, 8 a.m.
December	**8**	Friday	Fall semester classes end, 4:30 p.m.
December	**9–12**	Saturday–Tuesday	Reading days
December	**12**	Tuesday	Winter Graduates Recognition Ceremony
December	**13**	Wednesday	Final examinations begin
December	**17**	Sunday	Final examinations end; Winter recess begins
December	**18**	Monday	College Houses & Theme Houses close; 11 a.m.

The College notes that a number of religious holidays occur during the semester.
Please consult the College web-based calendar for these dates: http://www.fandm.edu/calendar.

Academic Calendar

Spring Semester 2024

January	**14**	Sunday	College Houses & Theme Houses open, 8:30 a.m.
January	**15**	Monday	Martin Luther King Day (offices open)
January	**16**	Tuesday	Spring semester classes begin, 8 a.m.
January	**31**	Wednesday	Degree conferral date for fall and winter graduates
March	**8**	Friday	Spring recess begins, 4:30 p.m.
March	**18**	Monday	Spring recess ends, 8 a.m.
April	**25**	Thursday	Spring semester classes end, 6:05 p.m.
April–May	**26–29**	Friday-Monday	Reading days
May	**30**	Tuesday	Final examinations begin
May	**4**	Saturday	Final examinations end
May	**5**	Sunday	College Houses & Theme Houses close, 11 a.m.
May	**11**	Saturday	Commencement

The College notes that a number of religious holidays occur during the semester. Please consult the College web-based calendar for these dates: http://www.fandm.edu/calendar.

2022 Summer Session I

(5 WEEKS, JUNE 6–JULY 5, 2022)

Friday, May 19, 2023	Registration Deadline
Sunday, June 4, 2023	Housing opens for Session I, noon
Monday, June 5, 2023	Session I classes begin
Tuesday, June 6, 2023	Session I deadline for course changes or withdrawing without record by 4:30 p.m.
Friday, June 30, 2023	Session I deadline to withdraw with record
Friday, June 30, 2023	Session I grading option (P/NP) deadline
Wednesday, July 5, 2023	Session I classes end
Thursday, July 6, 2023	Students in residence must vacate their rooms by 4:00 p.m.

2022 Summer Session II

(5 WEEKS, JULY 10–AUGUST 8, 2023)

Friday, June 23, 2023	Registration Deadline
Sunday, July 9, 2023	Housing opens for Session II, noon
Monday, July 10, 2023	Session II classes begin
Tuesday, July 11, 2023	Session II deadline for course changes or withdrawing without record by 4:30 p.m.
Friday, August 4, 2023	Session II grading option (P/NP) deadline
Friday, August 4, 2023	Session II deadline to withdraw with record
Tuesday, August 8, 2023	Session II classes end
Wednesday, August 9, 2023	Students in residence must vacate their rooms by 4:00 p.m.

The Franklin & Marshall Curriculum

SEE GRADUATION REQUIREMENTS PAGE 140.

The Franklin & Marshall Curriculum combines a spirit of innovation with a strong sense of tradition, and provides a framework for our students' intellectual development over their four years at Franklin & Marshall College. Called "Connections," our curriculum encourages students to become responsible, creative, ambitious participants in learned discourse and discovery by making connections: connections across disciplines, connections between theory and practice, and connections between their liberal arts education and the world. A liberally educated person is one who is inquisitive about all realms of thought, who is able to take into the wider world a comfort with ambiguity and respectful debate, who understands the limits of knowledge and the value of evidence, who has refined his or her judgment about the good and the beautiful, and who has learned to analyze critically, to speak persuasively, and to listen attentively. The Connections curriculum guides students to become such educated people.

The curriculum has three phases: Introduction, Exploration and Concentration. Together with electives, these phases offer appropriate balance between structure and choice to allow the construction of an individualized educational experience.

In the Introduction phase, students take one small, intensive seminar, Connections, which aims to introduce students to the standards of intellectual discourse and the communities that sustain it. This course also sequences instruction in writing, research, and oral presentation. In Connections, students become members of our intellectual community and learn the practices of critical analysis, research, writing, and civil debate that will help them attain their academic goals.

In the Exploration phase, students take courses that promote understanding modes of study in different intellectual arenas, from creating art to gaining competency in a foreign language to applying the scientific method. As they progress, students make connections among the ways different disciplines seek truth and structure inquiry.

The Concentration phase is the culmination of our students' four years of work and study. This phase is represented by their study in a major discipline and may include synthetic projects, capstone seminars, and one-on-one research. Given their growing intellectual maturity, students will be in a position to reflect on the connections they have drawn and the paths they have charted through the curriculum, both inside and outside their major fields.

All courses undertaken to fulfill the introduction, exploration, and concentration phases of the curriculum must be taken for a regular letter grade.

INTRODUCTION: CONNECTIONS SEMINARS

In their Connections Seminar, students will:

1. Develop curiosity in order to learn how to read, write, listen, and converse in an intellectual community
2. Develop judgment in order to create and evaluate effective arguments, ideas, and solutions

The Connections seminar is a small class limited to 16 students focused on three important characteristics: inviting first-year students into an intellectual community and a life of the mind; building skills in close reading, writing, and oral presentation; and integrating classroom work with residential life.

CONNECTIONS 1 SEMINAR

The Connections Seminar will spark curiosity and teach students to value and practice our shared commitments to reasoned and respectful discourse. Students will develop comfort with debate and ambiguity and become active participants in a culture of evidence. The Connections Seminar will enfranchise students first as members of the intellectual community of their classroom, and then as members of wider and interconnected intellectual communities on campus and beyond. Students learn to observe closely the world around them, the details of the arguments they read, and the way those arguments marshal evidence. They also listen carefully to their peers' ideas, and improve their expression of truth, conciseness, and accuracy in their discourse.

Students who enroll in a particular Connections seminar live together in one of the College Houses. This promotes an integration of the residence hall and the classroom that enhances both the academic success and the personal growth of students.

Students are expected to complete a Connections Seminar in their first semester. A list of current Connections Seminars appears on pages 9–11.

EXPLORATION: LIBERAL LEARNING

In their Exploration courses, students will:

1. Acquire familiarity with broad divisions of knowledge, modes of inquiry, and creative practices characteristic of different intellectual and expressive arenas
2. Develop intellectual breadth and versatility, fostering the ability to make connections across a broad range of disciplines, practices, and experiences

To this end, students will complete courses among the traditional divisions of intellectual inquiry in the liberal arts, including the Arts, Humanities, Social Sciences, and Natural Sciences, in addition to language study and exploration of the non-western world, as described below. Students may also choose to pursue a Certificate, as described below.

CERTIFICATES

Certificates are not required for graduation. They are optional experiences that allow students to plot novel pathways through the curriculum and document interests and competencies outside of the major or minor. A certificate is a curated list of three to five credit-bearing activities in two or more departments that explore a coherent topic. For a list of currently offered certificates and their requirements, please see pages 7-8.

ARTS

Goal: Create, perform, or study art

Courses that meet this goal are designated A in the catalog, and include the study of the creative and performing arts, as well as courses in the history, analysis, and criticism of the arts, including creative writing, but excluding the study of literature. Students must earn one course credit in this area.

HUMANITIES

Goal: Analyze the systems of belief, knowledge, and ideas of the humanities

Courses that meet this goal are designated H in the catalog, and focus on the study of ancient and modern literature, classical and modern languages, religion, or philosophy. Students must earn one course credit in this area.

SOCIAL SCIENCES

Goal: Learn about one or more societies or cultures in terms of their social, political, or economic organization and/or their history

Courses that meet this goal are designated S in the catalog. They focus on history, ethnographic study, or the political and economic organization of the social world. Students must earn one course credit in this area.

NATURAL SCIENCES

Goals: Practice the scientific method and better understand the larger social implications of science

Students may satisfy these goals in either of two ways:

1. They may take two science courses with labs (N); or
2. They may take one lab science course plus one course designated "Natural Science in Perspective" (NSP)

Natural Science in Perspective (NSP) courses help students understand:

1. The role played by theory in the natural sciences
2. The role of evidence in developing and testing scientific theories and what constitutes acceptable evidence in the natural sciences
3. How science deals with uncertainty, thus increasing students' ability to reason quantitatively
4. The role science plays in today's society, including those questions science attempts to answer and those questions that lie outside its domain
5. Real-world situations in which policy decisions need to be made without complete understanding or certainty

A list of NSP courses appears on pages 12–13.

LANGUAGE STUDY

Goal: Acquire linguistic and cross-cultural competency through foreign language study

Competency in a foreign language helps students develop an informed and thoughtful awareness of language as a system and facilitates their exploration of other cultural worlds. Students are strongly encouraged to begin language study in their first year and to complete the sequence of classes promptly; lengthy gaps between levels may disadvantage students in the next level course. Students are encouraged to complete their intermediate language competency by the end of their junior year (Please note that most departments offer the 101 introductory level course only in the fall semester.)

On-campus placement tests are available throughout the year and will determine the student's appropriate level. Placement results are valid for two semesters; after that a student must retake the placement test. Students enrolled in a language class may not take the placement test in the same language after the first two weeks of class.

To fulfill the goal to "acquire linguistic and cultural competency through foreign language study," students must pass, with a regular grade, the third course in a foreign language sequence or demonstrate equivalent proficiency through testing. The requirement may be satisfied in any of the following ways:

1. Passing at least one course at the 200 level or above taught in the student's non-native language
2. Studying in a non-English speaking country and completing a course at the 200 level or above in a foreign language
3. Scoring 4 or 5 in the Advanced Placement Exam in a foreign or classical language
4. Scoring 5 or higher in a Foreign Language Course via the International Baccalaureate
5. Placing into the fourth semester course or higher in the language sequence as taught at Franklin & Marshall

through a placement exam administered by the appropriate Franklin & Marshall academic department

Note that a student who tests out of this requirement for a particular language and who then decides to enroll in the 101, 102, or 201 level (the first three semesters) of that language forfeits the waiver and must complete a foreign language through the 201 level (third semester).

By completing and submitting a petition to the Committee on Academic Status, international students from non-English speaking countries may receive a waiver of this requirement. International students should contact the Office of Student Affairs to begin this process.

Courses that satisfy the Language Study requirement are designated (LS).

WORLD PERSPECTIVES

(For students entering the College in the Fall of 2021 and following years)

Goal: Engage with and analyze the diversity of cultures and interrelated historical processes that have shaped the contemporary world; develop the skills to reach beyond and question the historically dominant perspective of European and European-settler societies; and grapple with perspectives originating from outside these dominant traditions, including the perspectives of indigenous, colonized, diasporic, and/or exilic groups.

A non-F&M course (including one taken abroad) may count toward the WP requirement if that course satisfies the goal described above; such courses will require approval by the appropriate department or program chair. (In cases where a course in question falls outside the domain of a department or program, the decision to approve will be made by the director of International Studies.) This requirement cannot be met via a proficiency exam, but only by earning a course credit for having completed an academic experience after matriculation at a college or university.

NON-WESTERN CULTURES

(For students entering the College in the Fall of 2020 and preceding years)

Goal: Gain an understanding of the widely disparate ways in which human social and cultural life can be experienced and organized through an investigation of non-Western cultures and societies, including indigenous, colonial, and postcolonial contexts and/or gain a critical understanding of the West/non-West distinction, the limitations of this dichotomy, and the hybridity present in most cultures and societies.

Courses that meet either or both of these goals are designated (NW) in the catalog and are offered by a variety of programs and departments.

The NW requirement can also be met by achieving linguistic and cultural competence in a non-Western language as demonstrated by the completion of a course in such languages at the 200 level or beyond. (Arabic, Chinese, Hebrew, Japanese)

A non-F&M course (including one taken abroad) may count toward the NW requirement if that course satisfies at least one of the goals described above but requires approval as satisfying these criteria by the appropriate department or program chair. (In cases where a course in question falls outside the domain of a department or program, the decision to approve will be made by the director of International Studies.)

This requirement cannot be met via a proficiency exam, but only by earning a course credit for having completed an academic experience after matriculation at a college or university.

CONCENTRATION

In the Concentration phase, students will:

1. Gain depth and breadth within a specific field of inquiry.
2. Extend and deepen writing and analytical skills within the context of a specific discipline
3. Reflect on their intellectual development and prepare for the future

At Franklin & Marshall College, focus on a major field of inquiry allows students to pursue advanced work, which may include independent study and original research. Over four years, students hone their interests to develop a greater mastery over an area of specialty, and many do exceptional work in advanced research, upper level seminars and independent investigations. Students will have opportunities to participate in assessment and reflection exercises, whether formal or informal, curricular or non-curricular, and will be able to meet with advisers and professional staff to help prepare them for post-graduate life.

To qualify for the Bachelor of Arts degree, a student must complete a prescribed concentration of courses, referred to as the major. A major program must consist of at least eight required course credits and may not exceed 16 required course credits. All courses meeting major requirements must be taken for a regular grade; a student must earn a minimum of a 2.0 grade point average in those courses used by the major department to compute the major grade point average.
Descriptions of course requirements for each major offered by the College can be found in the Catalog sections on Departmental offerings.

A student may declare more than one major. A student who wishes to declare more than two majors must have the approval of the Associate Dean of the Faculty.

Students may also satisfy the major requirement by designing a Special Studies major or a Joint major.

SPECIAL STUDIES MAJOR

Students design a Special Studies major in consultation with the Special Studies adviser and a primary and secondary adviser. The design must be intellectually coherent and include courses from three different departments. The major must be a genuine liberal arts major that could legitimately be offered at the College and must progress through higher levels of courses; an assemblage of introductory courses from three departments is not acceptable.

JOINT MAJOR

A Joint Major is a concentration of courses from two departments/programs (at least one of which offers a major) and requires a rationale and the approval of both departments and the Associate Dean of the Faculty. Each of the component

majors must be represented by eight distinct course credits. The regulations for admission to, and the maintenance of, an academic major at Franklin & Marshall College can be found in the "Majors, Minors and Certificates" section of the Catalog, pages 147–148.

THE MINOR

Students may choose to complete up to two minors. Minors, either disciplinary or cross- disciplinary, consist of six course credits. A student may officially declare one minor. Departments and programs that offer minors are: Africana Studies; Anthropology; Art; Chemistry; Classics; Comparative Literary Studies; Computer Science; Dance; Economics; English; Environmental Studies; Film and Media Studies; French; Italian; Geosciences; German; History; International Studies (includes Area Studies); Judaic Studies; Latin American Studies; Mathematics; Music; Philosophy; Physics; Psychology; Religious Studies; Russian; Science, Technology and Society; Sociology; Spanish; Theatre; and Women's, Gender and Sexuality Studies. Specific requirements for a minor are listed with each department's offerings. All courses meeting the requirements for a minor must be taken for a regular grade.

The regulations for admission to, and maintenance of, a minor can be found in the "Majors, Minors and Certificates" section of the Catalog, pages 147–148.

ELECTIVES: EXTENDED EXPLORATION

Within each phase of study, the curriculum is designed to incorporate additional curricular explorations. These are electives—courses that do not satisfy a requirement in the introduction, exploration, or concentration phases. Electives allow students to gain additional depth of knowledge outside their major or minor field of study, and to explore unfamiliar areas of knowledge. In addition to regular courses in the curriculum, electives may include internships, off-campus study, guided group study, or independent studies undertaken outside the major. Through the strategic use of electives, students individualize their academic experience. Thus, there is no curricular structure imposed on electives; students may take as many or as few as their other curricular commitments permit. However, students are encouraged to consult with their advisers so as to make best use of these opportunities in the context of their course of study.

INTERNATIONAL AND OFF-CAMPUS STUDY

STATEMENT OF PHILOSOPHY

Recognizing the global nature of contemporary society as well as the need for intercultural understanding, Franklin & Marshall College views international study as a valuable component of a liberal arts education. Study abroad promotes an increased understanding of the complexity of language and culture. It also constitutes a critical element of the College's commitment to build an increasingly international campus. Franklin & Marshall College therefore encourages its students to give serious consideration to study in another country.

The College approaches international education as an integral part of the entire undergraduate experience. We view it not as a term away from campus, but as an encounter seamlessly connected with a student's entire education — before, during, and after the time spent off campus. Students planning foreign or domestic off-campus study will work closely with the Office of International Programs and with their academic advisers to select programs and courses of study that further their educational goals.

OPTIONS FOR OFF-CAMPUS STUDY

Franklin & Marshall College currently pre-approves more than 150 different off-campus study programs in 50 different countries, including programs led by F&M faculty members. Each of these programs has been approved by a faculty committee and the Office of International Programs to ensure strong academic quality and opportunities for cultural learning and engagement with the local community. Off-campus study programs approved by F&M offer coursework, internship, and field research opportunities that provide depth of knowledge and intercultural perspectives on courses and topics studied on-campus. Students interested in off-campus study should speak with their faculty adviser early in their academic career at F&M, and visit the Office of International Programs at least two semesters in advance of the planned time away to begin shaping their off-campus study experience. For more information on off-campus study opportunities, please visit www.fandm.edu/off-campus.

Franklin & Marshall also offers the innovative International Studies program, an interdisciplinary academic program that combines off-campus study in a non-English-speaking-location with coursework on and off-campus. The mission of the program is to unite a cohort of students who, both individually and in collaboration, will broaden the experience of their various major programs as they develop an international perspective and immerse themselves in the language and culture of a non-English-speaking country.

In addition to off-campus study programs, Franklin & Marshall also provides funding opportunities for off-campus summer study, internships, volunteer experiences, and research. Please see the section on Summer Travel Awards for a list of these awards.

FRANKLIN & MARSHALL PROGRAMS AND PARTNERSHIPS

Franklin & Marshall offers more than 150 approved off-campus study experiences, including faculty-led programs as well as partnerships with a number of U.S. program providers and overseas institutions. Many of these programs offer coursework in English or a local language, as well as internship and research opportunities. Advisers in the Office of International Programs, in partnership with the student's academic adviser, offer guidance on program selection.

ADVANCED STUDIES IN ENGLAND

Owned by Franklin & Marshall, the Advanced Studies in England program is administered in association with the University College, Oxford University, and is located in Bath, England. The program offers courses in literature, classics, government, history, creative writing, theatre, and film during the fall and spring semester as well as a summer session. Students studying with ASE also have the opportunity to participate in an academic internship. In addition to students from Franklin & Marshall College, the program enrolls students from other affiliate institutions, such as Oberlin, Bucknell, Denison and Gettysburg

GUIDELINES FOR INTERNATIONAL AND OFF-CAMPUS STUDY

While most students participate in off-campus study during their junior year of study, opportunities exist for earlier or later study. Off-Campus study advisers in the Office of International Programs work with students and their faculty advisers to find programs that match student academic and cultural interests; off-campus study advisers also support students throughout the program application process and provide pre-departure orientation and advising. Students interested in exploring off-campus study opportunities are encouraged to begin working with the Office of International Programs staff at least two semesters in advance of the intended semester or summer off-campus.

In order to study off-campus, Franklin & Marshall requires that all students:

- have a minimum 2.5 cumulative GPA (though many programs require a higher GPA for participation so a GPA of 2.75 or above is strongly recommended),
- have a plan to declare a major area of study before attending a semester-long program,
- be making satisfactory academic progress,
- demonstrate evidence of social maturity, and
- not be on any academic or disciplinary probation.

Students who do not meet these criteria should discuss their interests with an off-campus study adviser in advance of the typical one-year timeline. Depending on the particular circumstance, the student may be required to file a petition to study off campus if one of the above criteria is not satisfied.

For the majority of students who participate in an off-campus study program during the semester, Franklin & Marshall will bill the student the College's tuition fee; Franklin & Marshall College will then pay the program tuition on the student's behalf. Neither confirmation deposits, nor room & board are billed by F&M; these charges will be sent directly to the student by the off-campus study program provider. Students participating in an off-campus study program during the summer should expect to pay all program costs directly to the program provider, except in the case of Franklin & Marshall faculty-led programs (Summer Travel Courses). Students participating in faculty-led programs are automatically considered for need-based aid. For more information about this policy or exceptions, please visit www.fandm.edu/off-campus.

During the academic year, students will continue to be eligible for financial aid during a term of off-campus study, including federal and state loans as well as Franklin & Marshall scholarships and grants. Students who receive Grant-in-Aid benefits will continue to access these benefits for the semester off-campus. This benefit is only available to students of eligible full-time F&M faculty and staff. Students receiving Tuition Exchange benefits will continue to access these benefits for the semester off-campus.

A number of additional scholarships and financial aid opportunities may be available for off-campus study, depending on the student's demonstrated financial need and other factors. Students are encouraged to apply for national scholarships, such as the Gilman or Boren, as well as program scholarships, scholarships for first-generation college students, or location-specific scholarships. Off-Campus Study advisers can provide more information about additional funding opportunities. For more information about financial aid policies and scholarship opportunities, please visit www.fandm.edu/off-campus.

SUMMER TRAVEL, PROJECT AND INTERNSHIP AWARDS

The Margery Brittain Travel Award
This award enables students to improve their foreign language ability through travel or study in a country whose language they have studied previously.

The Bagdasarian Award
This award supports students studying or engaging in volunteer activities outside the U.S. with preference given to students traveling to developing and third-world countries.

Departmental Summer Foreign Study and Travel Awards
These awards enable foreign study and travel by outstanding sophomores planning a major or in some cases a minor in each of six departments: Art, Classics, French, Italian, German and Russian and Spanish.

John Kryder Evans Summer Study Award
This award honors the memory of Mr. Evans '11, who served with distinction as a Trustee of the College from 1940 to 1980 and spent many years with General Foods Corporation. Candidates must demonstrate quality of character, personal and intellectual promise and an enthusiasm for international experience. Preference is given to projects that reflect ethical or social concerns.

Charles J. G. Mayaud Awards
These awards, given in honor of the late Professor Mayaud, Professor of French and long-time chair of the Department of French and Italian, enable students to carry out educational projects abroad. Candidates should demonstrate quality of character, personal and intellectual promise and an enthusiasm for international experience.

Paul A. Mueller, Jr., Summer Awards
Current sophomores are eligible to apply for the Paul A. Mueller, Jr., Summer Award in order to pursue projects that foster personal growth, independence, creativity, leadership and personal interests, in the United States or abroad.

Sidney Wise Public Service Internship Program
The Sidney Wise Public Service Internship Program honors the memory of Professor Sidney Wise, who was committed to providing for students first-hand experiences in government and guidance to alumni in the field. This ten-week summer program pays students a stipend to take full-time internships in national, state, or local government or in government-related non-profit agencies. Interested students should contact the Government department for further information.

Alice Drum Award for Summer Research in Women's, Gender and Sexuality Studies
This award is given annually to support student summer projects related to research, creative arts, or community and public service. Proposed projects must further knowledge of the roles of women and/or gender in society. Recipients must also show quality of character, personal and intellectual promise, and an enthusiasm for learning from the proposed experience.

Maury Bank Summer Study Award
In memory of his late parents, Pearl and Maury Bank, Lawrence H. Bank, Esq. '65 established the Bank Summer Study Award to support Franklin & Marshall students in studying abroad during the summer in the field of Judaic Studies. The amount of the award is $2,500, to be distributed to one or several participants.

Other Departmental Summer Awards
The Art Study Award assists a studio art major, in the summer after junior year, to pursue a formal internship experience. **The Harry L. Butler Award**, honoring the late Professor Butler, for many years chair of the Department of French and Italian, assists educational travel by a high-achieving student of French. **The Alice and Ray Drum British Isles Summer Travel Award** supports summer research in the British Isles, with preference to an English major. **The Harry W. and Mary B. Huffnagle Endowment** supports coursework or research experience by biology majors at biological summer field stations in the U.S. or abroad. **The Michelle Kayal Memorial Scholarship Award** enables a student majoring in biology to conduct research in the biological sciences. **The Keck Summer Internships** bring together students and faculty from 12 of the country's most outstanding undergraduate liberal arts institutions to pursue geoscience research with the support of the W. M. Keck Foundation. **The Geoff Pywell Memorial Prize**, created in memory of Geoff Pywell, member of the faculty in Theatre, and of Joan Mowbray, secretary of the Department of Theatre, Dance and Film, supports a rising sophomore or junior for summer study in acting or directing. **The Russell Summer Russian Study Award**, given in honor of Thomas W. and Dorothy M. Russell, enables outstanding students of Russian to study Russian language and culture in Russia. **The Franklin J. Schaffner '42 Theater Award**, in memory of the late Academy Award-winning director of numerous movies, television programs and plays, enables students to study British theater on location. **The Peter S. and Irene P. Seadle German Travel Award** supports a special project or internship in a German-speaking country by a rising senior who is a non-native speaker of German. More information on these awards is available from the relevant departments.

CERTIFICATES

Certificates are supplemental educational pathways students can pursue at F&M. This is neither a major nor a minor, but will appear on a transcript to document training and education in a particular area.

There are seven certificates available at F&M. Each explores new and innovative fields of study through the lens of two or more departments. To complete a certificate, students must fulfill specific, for-credit activities (such as courses or internships), similar to major and minor course requirements.

DATA SCIENCE

Contact Person: Danel Draguljic, Associate Professor of Mathematics

Disciplines: Math, Computer Science, Philosophy

This certificate mixes math, computer science, and philosophy to provide students with the knowledge necessary to work effectively with data. Students will gain skills in data cleaning and wrangling, visualization, statisticals, and concepts in computer science and computational problem solving. Due to the omnipresence of data and data-driven decisionmaking, the certificate includes exposure to ethics designed to foster good decision making with respect to issues of data ownership, security and sensitivity of data, privacy concerns of data analysis, and transparency.

The requirements for the Data Science certificate are:

MAT 175, Intro to Data Science
MAT 215, Intro to Statistical Modeling
One course from the following:
CPS 173, Intro to Computer Programming; CPS 111, Computer Science 1; CPS 112, Computer Science 2
PHI 130, Good Reason

DIVERSITY AND EQUALITY IN EDUCATION

Contact Person: Lee Franklin, Associate Professor of Philosophy

Disciplines: Philosophy, Sociology, and internship for credit in Lancaster schools

Pairing philosophy and sociology, this certificate builds a multifaceted foundation in the study of education. Students will philosophically investigate important civic issues while using a sociological lens to analyze the structure and dynamics of educational systems. Hands-on experiences are an important aspect of this certificate. Through a for-credit internship, students will work with students in Lancaster County schools, experiencing firsthand the lived effects of socially patterned inequalities while exploring educational principles regarding learning and equality. Students will then share their valuable insights through a capstone project presented at an annual symposium.

The requirements for the Diversity and Equality in Education certificate are:

PHI 272, Philosophy of Learning and Education
SOC 384, Urban Education
An internship/experience for credit offering classroom experience in Lancaster City Schools

HEALTH HUMANITIES

Contact person: Peter Jaros, Associate Professor of English

Disciplines: Science, Technology and Society; History; English; Women's, Gender and Sexuality Studies; Philosophy

This certificate incorporates rich multidisciplinary perspectives on questions of health, illness, medicine, and disability. Health Humanities, a growing field at the intersection of humanistic scholarship and health professions, is a natural fit for F&M's strength across the liberal arts and our students' interest in health professions–and in broader questions of health, including mental health and public health. The certificate includes three key perspectives: historical, ethical, and literary/cultural.

The requirements for the Health Humanities certificate are:

Historical Perspectives on Health: one course from the following:

STS/HIS 311, History of Medicine; HIS/PBH/STS 278, Reproductive Health and Justice in Latin American History; HIS/STS 377, Medicine and Healing in the Mediterranean; HIS/IST 372, Pandemics in History

Literary and Cultural Perspectives: one course from the following:

ENG 273, Chronic Illness and Self-Care; PBH/STS/WGS 272, Narratives of Disability; LIT 27x, Medicine, Health, and Literature

Ethical Perspectives on Health, Life, and Death: one course from the following:

PHI 223, Biomedical Ethics; PHI 373, End of Life Ethics

LANGUAGE AND COMMUNICATION

Contact person: Nick Kroll, Associate Professor of Philosophy

Disciplines: Linguistics, Philosophy

Combining linguistics and philosophy, students will explore foundational questions about linguistic structure, meaning, and communication. They will investigate the cognitive dimensions of language, the social-political dimensions of language, and how the study of language connects to philosophical questions concerning the nature of truth, logic and knowledge.

The requirements for the Language and Communication certificate are:

LIN 101, Intro to Linguistics
PHI 238, Bad Language: Meaning and Use

One course among the following "Linguistic Focus" options:

LIN 120, Sociolinguistics; LIN 205,

Multilingualism; LIN/PSY 207 (formerly LIN/PSY 340), Psycholinguistics

One course among the following "Philosophy Focus" options:

PHI 244, Symbolic Logic; PHI 236, Language, Knowledge, and Reality; PHI 339, Philosophy of Language

LEGAL STUDIES

Contact Person: Jeff Nesteruk, Professor of Legal Studies, Deputy Provost for New Academic Initiatives

Disciplines: Government; Business, Organizations and Society; American Studies; Economics; English; and Philosophy

This certificate enables students to engage and evaluate legal discourse and argument as informed citizens. Students will build a foundational understanding of the legal field through a blend of government; business, organizations and society; American studies; economics; English; and philosophy. Drawing upon exploration of legal doctrines, reasoning, and policies in both public and private law, students will critically examine legal controversies from literary, economic, philosophic, and cultural perspectives. In addition to their course work, students will participate in F&M's Mock Trial Program, through which students gain hands-on experience, bolster their understanding of the justice system and hone their persuasion skills through team competition.

The requirements for the Legal Studies certificate are:

Doctrines and Principles, two courses: BOS 332, Law, Ethics, and Society; and GOV 314, The American Constitution

Practical Reasoning, one course: PHI 130, Good Reasons

Critical Perspectives, one course from the following: PHI 37x, Philosophy of Law; ENG 27x, Law, Literature, and the Person; AMS 378, Border Law and Policy; ECO 360, Law and Economics

Experimental Practicum: participation in one of the following experiential offerings: Mock Trial Team, Legal Internships

SOCIAL ENTREPRENEURSHIP

Contact Person: Joaquin Villareal, Director of Entrepreneurship

Disciplines: Interdisciplinary (Entrepreneurship); Earth and Environment; Sociology

Social entrepreneurship leverages best practices in innovation, social change, and startups to address social issues. Students interested in having a positive impact on the world around them will learn how to leverage entrepreneurship to address social issues that matter most to them. Students will learn how to become aware, recognize, and think critically about societal problems and needs in the world around them; develop their entrepreneurial mindsets and techniques to create solutions that are sustainable over time; and apply what they learn in a hands-on project. Blending entrepreneurship with earth and environment and sociology, the certificate builds a bridge between idea generation within academic settings and idea transfer to achieve sustainable, real-world impact regardless of students' chosen career paths.

The requirements for a certificate in Social Entrepreneurship are:

ENE 117, Environment and Human Values
SOC 100, Intro to Sociology
INT 274, Entrepreneurial Thinking
INT 375, Entrepreneurial Discovery

SUSTAINABILITY PLANNING

Contact person: Nancy Kurland, Associate Professor of Organization Studies

Disciplines: Biology, Earth and Environment, and Business, Organizations and Society

Sustainability planning is an increasing need in the marketplace. This certificate provides the glue that bonds biology; earth and environment; and business, organizations and society to prepare students interested in careers in sustainable practices. The four courses in this certificate provide opportunities for students to acquire skills in on-the-ground communication; policy analysis; research methods; risk assessment; sustainability metrics, tracking, and reporting; sustainability philosophies and techniques; and more. Applying what they've learned in the field, students also are encouraged to pursue hands-on experiences through internships or independent research projects.

The requirements for the Sustainability Planning certificate are:

ENE 216, Environmental Policy
ENE 277, Environmental Studies Methods
BOS 335, Business and the Natural Environment
BIO 374, Urban Ecology

Course Offerings

2022-2023
CONNECTIONS SEMINARS

CNX 103. Race Matters.
An introductory exploration of the powerful construct of "race" that has shaped social relations and institutional life since the European invasions of the very old, "New World." Our course will use examples taken primarily from the rich history and culture of African America. Beginning with recent discoveries using mitochondrial DNA, we chart the myth of biological difference based on race and how race myths became forceful tools for justifying slavery and Jim Crow. Simultaneously, we focus on how race myths came under attack by Black Liberationists who penned eloquent and compelling arguments against anti-Black racism throughout the 19th, 20th, and 21st centuries. Some of the course topics include Black-racial "authenticity," colorism, the one-drop rule, multi-racial, "mixed"-raced, passing, and whiteness. *Willard*

CNX 107. American History in True Crime.
Why are we fascinated with true crime stories? With serial killers? Unsolved murder mysteries? Acts of violence against prominent Americans? We will explore these questions through the lens of true crime stories, beginning with the first true crime novel, In Cold Blood, which tells the story of cold-blooded murder in white, middle-class Kansas. The unsolved murders of Malcolm X in New York and JFK in Dallas, the disappearance of Baltimore high-schooler Hae Min Lee, the horrors of the Chicago World's Fair killer, the obsessive search for a missing Black child who survived the police bombing a West Philadelphia rowhouse, these violent stories reveal much about American history even as they afford material for our examining the socio-psychological pathologies of their perpetrators. Throughout the seminar, we will look into our curious investments in these stories as we read them, write about them, discuss them, and even create our own. Warning: True Crime materials contain explicit violence of many sorts. For further information, please contact Professor Goeglein (Tamara.Goeglein@fandm.edu). *Goeglein*

CNX 111. Les Misérables.
Victor Hugo's tale of the epic struggle between Jean Valjean and Inspector Javert is not for the faint of heart. Through its sweeping portrait of 19th-century France, Les Misérables raises timeless questions. What price should a single mother pay for the love of her child? What is the nature of crime and punishment in a truly just society? How should wealth and power be distributed among social classes? Is revolution justified? Is redemption possible? Through a close reading of the novel, key secondary sources, and careful analysis of adaptations for the stage and screen, we will ask what we can learn from an informed, critical encounter with Les Misérables. *Gasbarrone*

CNX 114. Music and Emotion.
How does music move us? Why do we turn repeatedly to music in order to regulate and express our emotions? How and why do emotional responses to music vary from person to person and from culture to culture? In this class we will begin to answer these questions by drawing on various disciplinary perspectives, including psychology, sociology, anthropology, history, and literary and music studies. As students consider different approaches to these basic questions, they will develop reading, writing, and critical thinking skills fundamental to a liberal arts education, and develop their own research projects on the topic of music and emotion. *Jones*

CNX 118. Constructing Caribbean Identities.
This course focuses on the thought of major francophone Caribbean intellectuals, and the ideas that have influenced their work. Central to our exploration is an understanding of the French Caribbean history and cultural identities. Students will examine theoretical approaches to the colonial and postcolonial contexts in the Caribbean, and will explore the literary and cultural movements of Négritude, Antillanité (Caribbeanness) and Créolité (Creoleness) that have shaped Caribbean identities. The course will also focus on the concept of exile by considering writers of the French Caribbean diaspora. While reflecting on these concepts, students will develop and improve their academic skills: critical reading and thinking, effective writing, respectful dialogue, and information literacy. *Hebouche*

CNX 121. Storytelling.
The practice of sharing stories takes many forms across cultures and societies. Storytelling has a variety of uses, from entertainment and education to applications in the professions. In this course, students will share their own stories in order to connect with one another, their college house, and the greater F&M community, while at the same time developing their public speaking and active listening skills. Additionally, students will be trained in a creative storytelling practice directed at interacting with individuals with memory loss (TimeSlips™) in order to participate in a community-based learning project. Through an analysis of stories and scholarship about distinct forms of storytelling, students will develop close reading and critical thinking skills. *Stachura*

CNX 122. Machines and Their Critics.
This course will offer an overview of Western modernity with special emphasis on the ways in which technologies have shaped, and been shaped by, human practices, value-systems, and imaginations. Our goal is to acquire an understanding of the principal currents that have shaped Western culture from the sixteenth to the twentieth century. Though our primary focus is on technologies and their impact in the world, we will consider the historical and material conditions that provide the necessary context for the machines, systems, and technics in any given period. In doing so, this course introduces students to a range of issues revolving around the significance of technology—historical, philosophical, sociological, phenomenological, and ethical. *Modern*

CNX 129. Race and Religion.
Where does the idea of "race" come from? This course examines the role of religion in constructing the racial categories that were used to justify colonial conquest and domination from the 16th-20th centuries. Through literary and social science readings, this course will challenge students to think, write, and speak critically about the dynamics of race, religion, power, and privilege that have shaped the world in which they live today. Students will work on developing analytic writing skills, using empirical case studies to build support for comparative academic arguments. *Feldman*

CNX 132. Material Culture.
This course explores material culture from a variety of perspectives, and focuses specifically on the relationship between material culture and the development of our species. We will discuss the importance of creativity to the evolution of humans, the relationship between material culture and identity, object biographies, non-western ways of understanding the material world, and the manifold ways that materials shape what it means to be human. Along the way we will practice the close reading, writing, and speaking skills needed to thrive in an intellectual community. *Smith*

CNX 133. Ethics and Experimentation.
What is ethical when it comes to science? The answer to that question can vary depending on the test subjects (e.g., humans, rats), location (e.g., institutional review board protocols in that country), and time (e.g., current day, 1950s). While discussing this question and considering ethical dilemmas, students will develop skills of reading, speaking, writing, critical thinking, and research/information literacy. *Batres*

CNX 134. Why Shakespeare?.
People around the world read and perform the works of William Shakespeare. How have these words held so much attention for over 400 years? Do they truly animate and illuminate the universal human condition, or is it just a case of superb brand-name marketing combined with colonialism? Examining text, context, criticism, performance, and adaptation, we will try to understand Shakespeare's powerful position in past and present global culture. *Hopkins*

CNX 143. Israel in Context.
The trauma of the Shoah, the Zionist appropriation of the biblically-rooted notion of Jewish "chosenness," the 1948 conflict, and the sweeping victory of the six-day war in 1967 have contributed to the perception of Israel as a country with an exceptional character and destiny. This course aims to revisit this perception by placing Israel in a historical, cultural, and social comparative context. In addition to exploring the complexities surrounding Israel, this course offers several opportunities to reflect more broadly on the link between language, ethnicity, and nationhood, and provides grounds for a reflection on the nature of migrant cultures and divided loyalties. While engaging in a sustained research process, we will become conversant with key concepts and methodologies current in the scholarly discourse on Israel, and will hone critical thinking skills for evaluating primary and secondary sources from a broad multidisciplinary perspective. *Di Giulio*

CNX 145. Rights & Representations.
Do words and images injure people? This question has created legal and political controversies in the United States for over 100 years. With a particular focus on race and gender, this seminar explores this core question from several perspectives, including legal studies and history, as well as feminist and critical race theory. This class focuses on how social groups—on the left and right in American politics-- have tried to use the law to suppress "harmful" expression. This course connects several case studies: pornography, racial epithets sexual harassment, and hate speech on campus. *Kibler*

CNX 153. War and Peace.
Why do we go to war, and seemingly so often? How can we work towards a more peaceful world? In this course, we examine how causes of conflict, the laws and moral considerations of war, the way states pursue their foreign policies, and tools for ending war are not just a theoretical concept but part of our ordinary lives. This course will introduce you to the analysis of primary sources, close readings, oral and written analyses of eye witness reports, films, and journalistic coverage to explore theories of war as well as trends about how warfare is portrait in the media, the academic world, and our ordinary lives. We will also explore how common stereotypes impact peace and arms control movements, and analyze, develop, and articulate substantive arguments whether certain countries can inherently be more peaceful than others. *Kasparek*

CNX 167. Stories of Identity.
Stories are a pervasive aspect of human experience. This course will focus on the use of stories in constructions of our identities, including national, racial, ethnic, and gendered identities. Our course materials will draw on varied disciplines, potentially including literature, history, art, film, and politics. Along the way, we'll write critically about the stories we read and encounter. *Abravanel*

CNX 168. Forests, Wood & Culture.
Forests are the largest terrestrial ecosystems on earth and have shaped human cultures worldwide for thousands of years. Forests affect our lives in many ways, but the most powerful impacts have been through the remarkable properties of wood. We will explore ideas across many disciplines, including ecology, history, and philosophy, as we seek to understand (1) how wood and forest geography have affected us, (2) how we have altered forests globally, and (3) what our multi-faceted relationships with trees suggests about our values and our attitudes toward the natural world. *Sipe*

CNX 169. Exploring WWI: Lit, Art, Film.
A century ago, World War I transformed the world in dramatic and unprecedented ways. In this course, you will learn about the origins and chronology of the war and the technological innovations that emerged from it. You will explore the war's psychological and embodied effects, as well as artistic and cultural attempts to acknowledge, represent and memorialize its devastation. You will read history, fiction and memoir; you will examine propaganda posters, photographs and films; and you will analyze material evidence of World War I's destruction and commemoration. We will take advantage of our location in Bath, England to visit the Imperial War Museum in London and local World War I memorials, and we will take part in Remembrance Day ceremonies on November 11, the day on which World War I ended in 1918. This course will lay a foundation for the rest of your career at F&M. Through our work, you will improve your critical reading and discussion skills, practice writing in various genres, and develop your information literacy through a research project focused on a material object related to the war. *Redmann*

CNX 170. Environmental Impacts of War.
War not only destroys lives; it also disrupts environments. This course will examine the environmental impacts of war, from the trenches of World War 1 to the nuclear hazards of the Ukraine invasion. One case study will be the contested Donbas region of Ukraine, which is highly industrialized with Soviet-era mines, metallurgical plants, and nuclear facilities. Together, we will read and write about the geological and environmental history of war. *Bechtel*

CNX 172. Captivating Spaces.
"Captivating Spaces" explores the nature of liminal spaces and boundaries. The course investigates different types of spaces such as the prison; the hospital; the border between nations/neighborhoods; the battlefield, the magical world of Hogwarts; the college campus; utopic communities and dystopic arenas. How do these places work upon us, shaping identity, imagination, and experience, and giving rise to new forms and theories? Texts will include Reyna Grande's The Distance Between Us, J.K. Rowling's Harry Potter and The Sorcerer's Stone, Angela Thomas's The Hate U Give, Michel Foucault's "Of Other Spaces," Eve Ensler's "What I Want My Words to Do to You," and others. *Hartman*

CNX 173. The Culture of Eating: Food, Migration and Memoirs.
We are what we eat. Our identities are tied up with our food ways. Food is more than just calories consumed to sustain life: this course explores how food is central to our sociocultural being and the politics of food production and consumption. Throughout, we will read lots of great food writers and do a lot of our own writing about food. *Schrader*

CNX 175. Medieval Cities.
Medieval cities have been hailed as birthplaces of modern capitalism, centers of architectural splendor, and cradles of democracy. They have also been described as cesspools of pollution, strongholds of economic restriction, and sites of social repression. Through careful reading of both contemporary documents and modern studies, critical discussion of the evidence uncovered, and frequent writing we will work to find our own way through the conflicting claims. Topics include urban government, family life, sanitation, business and industry, and public ceremony. *McRee*

CNX 176. Gender and the Sense of Nation in Latin America.
What is our understanding of the concept of nation? How were nations formed in Latin America? How can we compare the role of women in shaping their nations to that of men? Are there different perspectives to understand such roles? We will attempt to answer these questions by reading both theoretical essays on Latin America, on the concept of nation, and on feminism, as well as fiction written by Latin American authors. While approaching these questions, students will also practice critical reading, presentation skills, both in oral and written form, as well as active discussion. *Tisnado*

CNX 179. Music and Environment.
How do music and listening help us find our place in the world? Hearing a global range of art, traditional, and popular musics, we explores how different cultures understand their ecologies through music, and the creative potential of these understandings for sustainability and environmental work. Reflecting on written, multimedia, and sound texts, students will tune their own written and oral expression; critical reading, listening, and thinking; and research methods--the foundational competencies for a liberal arts education. *Usner*

CNX 180. Animal Welfare.
Can you imagine what it's like to be a dog? A cow? A lobster? Our everyday lives affect animals in a variety of ways; this course will help you examine our interactions with animals more deeply. We will consider contemporary and historical sources from science, philosophy, and culture to help you wrestle with underlying issues in animal welfare and develop your own informed opinions. In the process, you will cultivate critical skills for success at F&M including close reading and description, engaging with competing perspectives, considering the source and audience of an argument, and constructing evidence-based arguments of your own *Bashaw*

CNX 184. Death, Horror & Humanity.
Horror films, extreme heavy metal and fascination with dystopian sci-fi has fostered a sizeable space in global entertainment over the past few decades. While many view these artistic expressions as mere escapism and fantasy, these vessels of entertainment are often created to provoke the public into thinking about larger overarching issues that affect society. This includes problems and conflicts surrounding race, political systems, gender and consumption practices. This course examines the deeper meanings behind many classic and modern horror films as well extreme metal music and sci-fi. Through close examination of film, music and literature we will study why horror and extreme music are often used as appropriate vehicles for commentary and the ignition of discourse surrounding challenges of the human condition. *Podoshen*

CNX 187. The Bible as Literature.
The study of the Bible as literature engages the reader with the literary aspects of the Bible. The object of inquiry is not historical but literary, an intellectual challenge akin to reading Shakespeare. We will read the classic King James Bible and modern literary translations. Selections from both the Hebrew Bible and the Greek New Testament form the basis for learning to describe our observations and articulate our reactions to the rich and difficult language of the texts. *Cooper*

CNX 188. The Good Life.
What is the "good life," both in the sense of a life of happiness and flourishing and an ethical life? How are they related? We will explore these questions, first, by examining several influential thinkers and texts from ancient Greece, India, and China. Then we will look at some of the ways happiness, fulfillment, meaning, and responsibility have been construed in modern times by philosophers, psychologists and social thinkers. The course will also foster crucial skills in reading, speaking, writing, critical thinking, and research. *McMahan*

CNX 189. Slavery: Past, Present (Future?).
This course takes a global approach to the problem of slavery in human societies. Drawing on the work of scholars, journalists, artists, and enslaved people themselves, we explore concepts of slavery and, by extension, the varied meanings of freedom. *Anthony*

CNX 196. Conceptualizing Community.
What does it mean to be a part of a community? While some manifestations of community are conceptualized in relation to geographic boundaries, others may be based on more abstract criteria. Membership in a "community" might comprise neighborhood residency, a social identity group, a shared ideological commitment, interactions in a virtual environment, or something else entirely. From MLK's celebration of the "beloved community" in pursuit of social justice, to Benedict Anderson's discussion of nations as "imagined communities," to the profitable real estate market for "gated communities--this Connections seminar will explore different ways of thinking about how humans establish and sustain communities, and, in so doing, develop collective identity and solidarity. In addition to this thematic focus, this Connections seminar is designed to provide you with an academic toolkit that will support your future success in college. To achieve this, our class assignments and activities are built around skills development in the areas of critical thinking/analysis, oral and written communication, active listening, and information literacy. *Rondini*

CNX 197. Entertaining Violence.
Gruesome TV shows, like The Walking Dead; shoot-'em-up videogames, like Grand Theft Auto; mayhem-filled movies, like Dead Pool; rough sports, like football... A lot of people love violent entertainments like these. (The professor included.) What are their appeals? What are their benefits? What are their dangers? Are they connected to irl violence? How can we enjoy them responsibly?... These are the kind of question this course addresses. The course is designed to develop students' ability to read, write, listen, and converse as part of an intellectual community. Besides learning how to research and advance a scholarly argument, students in this CNX seminar will learn how to craft a compelling video essay. Please be advised that, although every effort will be made to make class discussions safe, the course will likely cover some disturbing material, including sexual violence, suicide, and hate speech. *Eitzen*

CNX 198. Unreason.
In this seminar we will explore the philosophical literature that examines human reason as an ideal. We will look at readings from Homer, Plato, Nietzsche and others, and we will look at aspects of unreason in art, emotion, and madness. Students will have the opportunity to recognize, develop, and articulate their ideas by writing analytical papers, giving in-class presentations, and embarking on a sustained research project through creative and independent engagement with the materials. *Kaufer*

NATURAL SCIENCE IN PERSPECTIVE COURSES

NSP 109. How and Why We Run.
Running is both a fundamental form of locomotion and a popular physical activity. This course will examine the act of running from a scientific perspective, focusing on the physiology and biomechanics of running, as well as the emotional and cognitive effects of sustained aerobic activity. We will also explore reasons why different studies can provide contradictory results, and how research on running is represented in the popular media. Note that this course will not require any actual running. *Olson*

NSP 111. Energy Issues in Science and Society.
This course explores the basic science of energy, world energy use patterns and some of the environmental and social consequences of energy use. Statistics on energy use and energy resources around the world are examined. The laws of physics which govern energy production and conversion are introduced and used to quantitatively discuss energy sources. The scientific principles of electricity generation and alternative energies are discussed in some detail. The course touches upon the interplay between science, public policy and economics in dealing with energy issues. *Crawford*

NSP 112. The Nature of Oceans.
The Nature of Oceans will investigate the questions: what constitutes acceptable evidence in science and how do we make rational decisions about issues that affect shared natural resources? You will confront these questions through a series of case studies of current uses of ocean resources. Throughout the course you will explore the physiology of marine animals as well as the biology of diverse ocean communities and ecosystems. *Thompson*

NSP 117. Women/Science.
This course will introduce students to the role of women in science both as participants in the creation of scientific knowledge, and as the subjects of biological study of the female body. Topics will include sexual development, pregnancy, childbirth, and menopause, as well as education and professional achievement in the sciences. Students will examine the contributions of women scientists through the lens of feminism, with an emphasis on the barriers women have faced historically and those that remain today. *Same as WGS 117.* *Blair*

NSP 118. Water, Life and Society.
This course examines the history, development, management, and policy issues associated with one of the most remarkable substances on Earth, water. The storage and flow of water in the natural world are explored to provide a basis for considering how people have rerouted water since the development of agriculture. The association between civilization and the construction of dams and irrigation projects is explored using case studies that include water conflicts and shortages from around the world. As population and consumption grow and water becomes increasingly scarce and/or polluted, water management and policy become more complex. *Merritts*

NSP 119. Biological Determinism and Social Constructs.
This course will introduce students to the fundamental biological processes of inheritance and sex determination in living organisms and examine the interplay of these concepts in our (mis)understanding of two social constructs commonly attributed to a biological basis: gender and race. Topics will include diversity of sexual mating systems, mechanisms of sex determination, concepts of genetic transmission and ancestry, pedigree analysis and human population genetics. Students will critically evaluate studies that apply and extend these concepts and their intersection with social constructs. *Same as WGS 119.* *Mena-Ali*

NSP 136. Science Revolutions
This course surveys the question of what constitutes a scientific revolution. Beginning with Thomas Kuhn's famous theory in The Structure of Scientific Revolutions (1970), we survey numerous episodes in the development of the sciences, from the seventeenth century to the present. Using case studies from chemistry, physics, life sciences, and the interdisciplinary field of origin of life studies, we try to determine what it would mean for a scientific revolution to occur, would happen, and how to assess whether such a thing might be underway currently. The course in many ways serves as a broad introduction to history and sociology of science. *Strick*

NSP 137. History of Space and Time.
This course traces the development of views on space and time, from classical Greece to the modern theory of pace and time, relativity. Students will gain a conceptual understanding of relativity as well as use algebra to work out detailed problems. We will discuss some of the revolutionary aspects of relativity such as black holes, the warping of space, time travel and the big bang. We will explore the philosophical implications of relativity, how our modern view of space and time has changed our view of the world and how it has influenced society, literature and art. *Stubbins*

NSP 138. Lakes as Sentinels.
Lakes are considered to be sentinels of environmental change because they respond rapidly to meteorological conditions and are closely linked to the surrounding catchment. The course will focus on basic physics, chemistry, and biology of lakes, as well as the importance of freshwater to humankind. Hands-on experiences in the field and laboratory will be emphasized. *Fischer*

NSP 145. Illuminated: Light and Society.
This course will illuminate the nature of light and how it impacts society. The course will start with a quantitative introduction to light as an electromagnetic wave. We will build on this fundamental understanding of light to explain the origins of vision, our perception of color, and its manifestations in art and nature. Lastly, we will connect light to the development of technologies essential for an environmentally sustainable society, light-emitting diodes and photovoltaics. *Plass*

NSP 149. Life on Mars.
Is, or was, there life on Mars? What about in our Solar System or galaxy? These intriguing questions will be addressed by examining the origins and evolution of Mars, and by comparing Mars to the geological and biological evolution of the Earth. From Lowell's observations in the 1890's to exciting new discoveries by NASA's Mars Reconnaissance Orbiter and Phoenix Lander and the European Space Agency's Mars Express missions, our understanding of the red planet is increasing, but many questions remain. Perhaps human exploration of Mars will provide the answers and at the same time increase our appreciation of the uniqueness of planet Earth. *A. de Wet*

NSP 157. History of Natural History.
In this course, we'll cover briefly the history of man's fascination with Nature, from cave paintings to Ancient Philosophers to New World Explorers and beyond. The history of Natural History reflects very closely the evolution of the scientific method: with advances in philosophical and empirical approaches to interpret their observations, naturalists developed into scientists. The rigor of the scientific method can be understood when current forms of natural history are examined. From the development of ecology as a scientific discipline to the popularization of nature shows, a rigorous examination of natural history will allow students to visualize the different levels of data collection, analysis, confidence and uncertainty. As we learn from the past, students will start their own Naturalist journals as a way to appreciate nature and to develop a keen appetite and respect for the complex structure of our environment. We'll include a visit to the museum of natural history in Philadelphia, as well as Naturalist-oriented trips to the Millport Conservancy and other locations for exploration and inspiration. *Mena-Ali*

NSP 168. Food, Plants and Nutrition.
As the world population continues to increase, how do we feed the world's people? Who are the world's hungry and why? Can food be grown in a sustainable way? Is organic, local food production really better? What is the impact of livestock on the environment? Are genetically-modified crops the answer to world hunger, or do they threaten the ecosystem? Is there really a global epidemic of obesity? This course will examine concerns about food and nutrition that influence our lives as individuals and as members of local, national, and global communities. *Rice*

NSP 185. Impact of Reproductive Technology.
This course will examine how reproductive technology has altered the way humans create and view family. Advances in medicine and manufacturing in the past century have produced unprecedented levels of control in preventing or producing offspring. What are the modern ways to make a baby? How have these options altered our views of family planning and parenting? What is the effect on the legal, social, and spiritual standing of the child (or potential child)? How does the impact of modern reproductive practices vary with different religions and cultures? *Moore*

NSP 200. Petroleum and the Future of Energy.
The "end of oil" has been predicted many times, but social, political, economic,and technological factors have converged to sustain the petroleum industry for a 150 years. Modern civilization runs on petroleum, and with conventional sources depleting, the "unconventionals" (e.g. from fracking) and "renewables" (e.g. biofuels, wind and solar) are variously characterized as saviors of our lifestyle, or the nemesis of our environment. Supporters of these positions often argue based on carefully selected data, intentional propaganda, and/or unintentional ignorance. This course will supply you with a complete and factual understanding of the history and geology of conventional petroleum (i.e. how we got here), and the choices we must face as it inevitably runs out (i.e. where we go next). This course is intended to equip you with knowledge necessary to participate in emerging critical decisions and activities regarding the future of human civilization. *Bechtel*

NSP 210. Genetically Modified Organisms.
This course is designed for students not intending to major in the natural sciences, and is divided into classroom and laboratory components (there is no additional lab time). Topics discussed will include the origins and history of GMOs, their present uses in agriculture, industry and biomedicine, current controversies surrounding GMOs, and potential future applications of GM technology. A key focus of the course will be the use, misuse and selective disregard of evidence in the application of scientific research to policy considerations. Concurrently in the laboratory students will learn the techniques necessary to identify GMOs in food, and create their own (harmless) GMOs. *Fields*

Department and Program Offerings

KEY TO ABBREVIATIONS

(A) Arts (Distribution requirement)
(H) Humanities (Distribution requirement)
(S) Social Sciences (Distribution requirement)
(N) Natural Sciences with Laboratory (Distribution requirement)
(LS) Language Studies requirement
(NSP) Natural Science in Perspective
(NW) Non-Western Cultures requirement
(WP) World Perspectives requirement

Note: Courses with "7" in the middle (for example ENG 179, AFS 370) are special topics courses; titles and course numbers may vary from semester to semester.

AFRICANA STUDIES

Professor Doug A. Anthony, Chair

MEMBERS OF THE AFRICANA STUDIES PROGRAM COMMITTEE

Douglas A. Anthony	*Professor of History*
Giovanna Faleschini Lerner	*Professor of Italian*
Eiman O. Zein-Elabdin	*Professor of Economics*
Nadra Hebouche	*Associate Professor of Francophone Studies and French*
Ashley Rondini	*Associate Professor of Sociology*
Timothy D. Bechtel	*Director of F&M Science Outreach and Senior Teaching Professor of Geosciences*

Additional faculty not on the program committee also contribute to this program.

Africana Studies is an interdisciplinary program combining the study of Africa and the African Diaspora, including the African American experience. Numerous disciplines contribute to Africana Studies at Franklin & Marshall, among them American Studies, Anthropology, Economics, English, French, Government, History, Music, Religious Studies and Sociology.

A major in Africana Studies consists of nine courses:

AFS/AMS 150 or AFS/HIS 149

AFS/HIS 141 or 142

AFS/HIS 233

AFS 490

Five electives carrying an AFS designation, at least one of which must be numbered 300 or higher. At least one of these five AFS electives must come from American Studies, Art, English, French, Music or Religious Studies; at least one elective must come from Anthropology, Economics, Government or Sociology. Prospective majors should take note that some of the electives may have prerequisites (e.g., introductory level courses in Anthropology, Economics or Sociology), such that the number of courses necessary to complete the AFS major may exceed nine.

A joint major in Africana Studies consists of eight courses:

AFS/AMS 150 or AFS/HIS 149

AFS/HIS 141 or 142

AFS/HIS 233

Five elective courses carrying an AFS designation, at least one of which must be at the 300 level or above.

A minor in Africana Studies consists of six courses:

AFS/AMS 150 or AFS/HIS 149

AFS/HIS 141 or 142

AFS/HIS 233

Three electives carrying an AFS designation, one of which must be numbered 300 or higher.

For further information, students should consult the Africana Studies Program Chair.

Africana Studies students have studied abroad with the following programs in recent years: Arcadia University in Senegal; IES and SIT in South Africa; CET and SIT in Tunisia; CET and SIT in Morocco; SIT in Kenya; and VCU in Barbados. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

CORE COURSES

141. History of North and West Africa. (NW) (S) (WP)
This course introduces major themes in the history of North and West Africa from ancient Egypt through the present crisis in Sudan. Emphasis falls on West African political and social formations, domestic and trans-Atlantic slave systems, notions of identity, the role of Islam and the rise and fall of colonialism. Students use primary sources to explore historical problems. Final unit explores recent events in Sudan. *Same as HIS 141.*
Anthony

142. History of East and Southern Africa. (NW) (S) (WP)
Introduction to major themes in the history of East, Central and Southern Africa from the Bantu migration through the Rwandan genocide. Emphasizes social, political and religious change in pre-colonial Africa and resistance to slavery and colonialism. Students use primary sources to explore historical problems. Final unit explores the legacy of colonialism in the 1994 Rwandan genocide. *Same as HIS 142.* *Anthony*

149. Africa and the Black World: Concepts and Context. (NW) (S)
Explores the emergence of continental ("African") and racial ("Black") identities with particular emphasis on the roles of the trans-Atlantic slave trade, the rise of racial thought in Europe and the Americas and the impact of European imperialism. *Same as HIS 249*. *Anthony*

150. Introduction to African American Studies. (S)
The development of the United States as a global and multiracial society. Topics can include the transatlantic slave trade in the 18th and 19th centuries; Pan Africanism, mass media in the African Diaspora; the Harlem Renaissance and Civil Rights movement. *Same as AMS 150*.
Willard

218. Narrative Journeys in Arabic Literature. (H) (NW) (WP)
This course introduces students to a variety of narratives in different literary genres from the Arab world. The organizing theme of this course is that of the journey, whether it be a physical trek through the desert or a metaphorical one such as an inward psychological quest. Students will encounter narratives by both male and female writers from various parts of the Arab world and from different periods of Arabic literary history. All texts are translated from the Arabic into English. *Same as ARB/LIT 218*.
Kalleeny

233. African American History. (S)
An advanced course tracing the progress of African Americans from slavery to freedom, beginning in the larger Atlantic world of the 17th and 18th centuries, and continuing through the American Revolution, the battle against slavery culminating in the Civil War, and the struggle for black citizenship between the Reconstruction of 1865–1877 and the "long civil rights movement" of the 20th century. *Same as HIS 233*. *Gosse*

490. Independent Study.
The independent study is a requirement for completing an AFS major. It is intended to give students the opportunity to form a deeper holistic understanding of the field based on what they have learned in the program and their own independent investigation of a specific subject. The research question for the independent study may be inspired by a particular course, a conversation with a professor, or a student's personal interest. Independent studies are supervised by the Africana Studies staff. For more details, see the Africana Studies webpage. *Staff*

ELECTIVE COURSES

105. Jazz. (A)
The history of jazz, from its roots to the present day, with emphasis on stylistic distinctions. Considers African and European contributions, blues types, New Orleans jazz, Harlem Stride, Swing, bebop, cool jazz, hard bop, free jazz, fusion, neo-classical, and acid jazz, touching on most major figures and their contributions. Each stylistic period is studied from an economic and sociological viewpoint with emphasis on form, texture, improvisation, harmony, rhythm, and timbre.
Same as AMS 105 and MUS 105. *Butterfield*

106. History of the Blues. (A)
Blues history from its origins to the Blues Revival of the 1960s. Emphasis on the Delta blues tradition of Charley Patton, Robert Johnson and Muddy Waters. Additional topics include: oral formulaic composition; politics of race and sex in the blues; the blues as a "secular religion"; the music business; appropriations of blues style in jazz and rock; the ongoing function of the blues as a core signifier of "blackness" in American culture. *Same as AMS 106 and MUS 106*. *Butterfield*

131. History of Colonial Latin America: From Contact to Revolution. (NW) (S)
Survey of Latin America from pre-Conquest times to the present. Begins with historical backgrounds of indigenous societies as well as Spain, Portugal, and Africa before 1492, followed by an examination of the conquest and colonial period through independence. The course focuses on the contributions of these major cultural groups in the formation of colonial Latin American society and culture. *Same as HIS 131*. *Shelton*

169. Caribbean Literature. (H) (NW)
What is Caribbean literature? Some writers and scholars question the identity of a region of so many diverse languages, races, ethnicities, religions, and nations. At the same time, others argue for the coherence of a region marked by a history of European colonization and slavery. This course will focus on anglophone (English-language) Caribbean literature of the twentieth century, a rich and varied body of work that has recently produced two Nobel Prize winners, Derek Walcott and V.S. Naipaul. In this course, we will explore how this literature grapples with issues of race, gender, nationalism, independence, decolonization, the ethics of violence, the importance of vernacular expression, and the formation of a literary tradition. *Same as ENG 169*. *Abravanel*

213. Black American Film. (A)
An introduction to film studies using black film as a genre of Hollywood and independent film. Covers the work of Oscar Michaux through the "blaxploitation" films of the 1970s and beyond. Explores films as social commentary in their particular historical contexts. Particular attention is given to screen analysis of segregation, sexuality, class differences and more. *Same as AMS/FLM/WGS 213*. *Willard*

239. HipHop: Global Politics of Culture
Who gets to be "real" in hip hop? Why does being "real" matter? This course examines hip hop's "politics of authenticity," which opens avenues to help us speak about colonialism, white supremacy, sexism, and Black cultural resistance. Rightfully centering and honoring the genre's Afrodiasporic influences, we will examine debates involving transnationalism, gender, sexual, and racial boundaries in hip hop. We will also explore hip hop's global relevance, such as its sonic and cultural presence in reggaet n and its spread as a global dance form. Overall, this class will prompt students to untangle hip hop's seemingly contradictory ethos of "keeping it real" while simultaneously promoting broader ideals of cosmopolitanism and global commodification. Same as AMS/MUS/WGS 239. *Villegas*

256. African American Literature I:
Declarations of Independence and the Narratives of Slavery (H)
This course covers African American narratives of slavery from the colonial period through the early 19th Century. The Declaration of Independence, the founding narrative of American selfhood and agency, provides the discursive background of the course. The Declaration did not mention Slavery, thereby erasing Slaves' experiences in the American narrative about peoplehood. We will engage the logic, rhetoric and contradictions of the document by pluralizing "declaration" to broaden and then examine how Slaves' oral narratives (the Spirituals, etc.) and texts (by Phyllis Wheatley, Oladuah Equaino, etc.) were figurative and literal declarations of independence that simultaneously question the Declaration's principles and ideology and affirm its transcendent meanings in the writers' discourses on Slavery, Black humanity and selfhood, race, the American Dream, etc. *Same as AMS/ENG/WGS 256*. *Bernard*

257. African American Literature II:
Meaning of the Veil and African American Identity. (H)
In The Souls of Black Folk (1903), the African American writer W.E.B. Du Bois introduces two concepts—the "veil" and "double-consciousness"—to explain the black experience in America. This course, which covers African American literature from Reconstruction to the Harlem Renaissance, the Black Aesthetic/Black Power movement and beyond, will examine the recurrence of the veil metaphor (and its synonyms) generally and engage Du Bois's formulation of the concept specifically in the cultural and historical contexts that frame this period's literature. We will explore how writers (Paul Laurence Dunbar, Langston Hughes, Zora Neale Hurston, Ralph Ellison, Toni Morrison, etc.) engage topics (race, gender, music, identity, etc.) that reinforce, expand and/or complicate Du Bois's metaphor. *Same as AMS/ENG/WGS 257*. *Bernard*

281. Political Economy of Africa. (NW) (S) (WP)
A broad introduction to economic and social conditions in Africa and the factors that influence economic development in the region, power structures and processes of change. Historical analysis of pre-colonial systems of production and exchange and modifications introduced during the European colonial period. Examination of major current issues such as food production, external debt and the role of the state. Reflection

on the question of 'development.' Prerequisites: ECO 100 and 103, or permission of instructor. *Same as ECO 281.* *Zein-Elabdin*

283 B. African Drumming.
Private lessons and masterclass in African Drumming. Admission by audition with the instructor. May be repeated. (One half credit.) Same as MUS 283 B. *Same as MUS 283 B.* *Hessen*

301. Pops & Jelly Roll:
New Orleans and Its Music in the Early Twentieth Century. (A)
An examination of Louis Armstrong and Jelly Roll Morton's New Orleans. The course evaluates their music and the more general style of early New Orleans jazz in relation to the geographical, social, political, and economic dynamics of that great American city in the early 20th century. Particular attention will be given to the social and musical interactions among New Orleans' disparate ethnic groups that led to the formation of a unique style of jazz derived from ragtime, blues and the ubiquitous marching band music from that era. *Same as AMS 301 and MUS 301.* *Butterfield*

302. Bebop. (A)
A history of the bebop movement in jazz of the 1940s and '50s. Special attention given to the social, economic, and political conditions that led a small handful of musicians to abandon Swing Era big bands in favor of the small combos that formed out of Harlem jam sessions between 1941 and 1943. Covers distinguishing features of the bebop style through an examination of the music of Charlie Parker, Dizzy Gillespie, Thelonious Monk, and others. Concludes with an evaluation of the social and political meanings of bebop and its historical legacy. *Same as AMS 302 and MUS 302.* *Butterfield*

313. African American Religion. (H)
Surveys a variety of religious traditions and expressions of African Americans throughout the history of the United States. Of particular interest to our study will be the problems of slavery, colonization and racialism as they have been embodied in the history of African American religion. *Same as RST 313.* *Modern*

315. Cross-Cultural Psychology.
Cross-Cultural Psychology serves as an introduction to the relationships among cultural processes, human consciousness, human health and human development. Prerequisite: PSY 100 or SPM 100. *Penn*

316. Harlem Renaissance. (H)
The Harlem Renaissance represented an explosion of Black cultural, economic and political activity in the first and second decades of the twentieth century. Fifty years after emancipation, African Americans were still struggling for equality and acceptance from White America. The cultural products of the period -- events, writings, music, theater, and literature, for example -- represented a desire by African Americans to forge a new identity and find a place in American democracy. We will explore how African Americans used these cultural products to express their history, experiences, predicaments, hopes and racial consciousness and pride. In this course, we will examine some of the writers and the texts of the period. *Same as ENG/AMS 316.* *Bernard*

323. Cuba and the United States: The Closest of Strangers. (S)
This course examines the long history of relations between North Americans and Cubans, two peoples separated by only 90 miles. Our topics will range from baseball to guerrilla warfare, from the Mambo to the Missile Crisis. This history includes a shared commitment to anticolonial liberation; annexationist schemes among Southern slaveholders; repeated military interventions by the United States; solidarity from the U.S. with various Cuban Revolutions, including but not limited to Fidel Castro's; and two hundred years of cultural contact between African Americans and Afro-Cubans that has profoundly influenced U.S. culture, music, and sports. *Same as AMS/HIS 323.* *Gosse*

326. African Politics. (NW) (S)
An exploration of the socio-economic and political challenges facing Sub-Saharan Africa since independence. This course will focus specifically on the prospects for socio-economic development and democracy in Sub-Saharan Africa. Students will engage in a Reacting to the Past (RTTP) simulation of the South African move to majority rule. Prerequisite: GOV 120 or permission of the instructor. *Same as GOV 326.* *Dicklitch-Nelson*

334. The American South: Slavery, Secession and War, 1800–1865. (S)
Traces the antebellum south and the emergence of a distinct southern identity and consciousness by examining the following topics: slavery (from the perspective of both masters and slaves), the dispossession of the Native Americans, westward expansion and territorial ambitions in Central America and the Caribbean, politics at the national and state level, and the growth of the region's intellectual life. *Same as HIS 334.Pearson*

354. Gender and Race in Ethnic Studies Film.
"Gender and Race in Ethnic Studies Film" examines the concept of Ethnic Studies as an educational curriculum emerging from social movements. In an effort to understand Ethnic Studies, we will explore the media productions by and about people of color in relation to U.S. social unrests of the late-1960s, 1970s, and the aftermath of these decades. We will focus on three groups: U.S. Latinos, African Americans, and Asian Americans. *Same as AMS/TND/WGS 354.* *Villegas*

360. Race and Ethnic Relations. (S)
Study of intergroup relations, with an emphasis on processes of racial/ethnic stratification, assimilation and cultural pluralism. Focus is on American society, past and present. Topics include the development and change of race/ethnic identities, intergroup attitudes, racial ideologies, immigration, education and the intersection of race with social class and gender. Prerequisite: SOC 100. *Same as SOC 360.* *Rondini*

363. Marginal Sexualities in the Maghreb. (H) (NW) (WP)
This course will explore the cultural constructions of gender and sexuality in the Maghreb, and their relationship to the concept of nation. We will also focus on new spaces of negotiation offered on the threshold of the 21st century by Francophone North African authors such as Tahar Ben Jelloun, Rachid O, Abdellah Taïa, and Assia Djebar. The course will examine concepts such as desire, fluidity, heteronormativity, homosocial vs. homosexual relationships, hypermasculinisation, discursive/rhetorical/subjective communities, and misogyny in the context of 20th/21st century North Africa. Prerequisite: FRN 261 or FRN 302 or placement. *Same as FRN/WGS 363.* *Hebouche*

366. Race, Ethnicity, and Health. (S)
The course will utilize a sociological lens to examine the role of race and ethnicity in health outcomes, healthcare experiences, medical research, and clinical practice. Topics will include: socio-historical perspectives on notions of race in relation to biological difference; socio-historical understandings of the health consequences of racialized public health policies and politically sanctioned medical practices;contemporary racial and ethnic disparities in disease morbidity and mortality indicators; the operationalization of racial categories in epidemiological, public health, and biomedical research and practice; contemporary debates regarding race and genomics; and understandings of racial and ethnic dynamics in relation to health and medicine at the intersections of socioeconomic class, immigration status, gender, sexuality, and other markers of social identity. *Same as SOC/PBH 366.* *Rondini*

369. À contre-courant: le théâtre francophone (H) (NW) (WP)
Le théâtre francophone est généralement empreint d'un sentiment d'urgence, d'un besoin irrépressible de se dire. Le théâtre francophone, c'est la communauté qui s'affirme faisant du texte un catalyseur de l'âme de la collectivité. Les pièces de théâtre francophones résonnent et raisonnent suivant leur pertinence sociale et mettent à mal le principe même de la règle. Faisant fi des conventions, ces mêmes pièces font des choix dramatiques expérimentaux et se posent en détractrices de la tradition sociale, politique et culturelle, elles se posent en théâtre de résistance. Dans ce cours, nous explorerons différents domaines tels que la typographie, la narration, l'espace et le temps, ou encore la langue, sur lesquels se jouent diverses stratégies de résistance et qui témoignent de l'aliénation de l'Homme dans un contexte francophone classique, colonial et postcolonial. Prerequisite: FRN 261 or FRN 302 or placement.
Same as FRN 369. *Hebouche*

430. Africa and Slavery. (NW) (S) (WP)
This course begins with an overview of how slavery has functioned in a variety of societies around the world through history, with the goal of cultivating a broad conceptual understanding of what we mean when we talk about slavery. We then narrow our gaze to Africa, concentrating on

how African conceptions of freedom and servitude contrasted with and, in an economic sense, complemented European notions. Our engagement with the Atlantic slave trade focuses on the African side, and draws on primary and secondary sources to explore African perspectives. We conclude the course with a look at arguments about what some scholars and activists argue is a resurgence of slavery in today's world. Students will write a significant research paper on some aspect of African slavery. *Same as HIS 430.* *Anthony*

460. Race, Gender, and Class on Campus. (S)
On college and university campuses across the country, intersecting social identity politics have come to the fore over the course of recent decades. This course will examine the socio-historical forces and contemporary dynamics that inform, challenge, support, and disrupt the establishment and cultivation of inclusive campus communities. Drawing from sociological literature on higher education, social mobility, race, gender, socioeconomic class, and social policy, students will critically analyze the complex issues germane to how American institutions of higher education operationalize ideas of "diversity" and "inclusion" in the 21st century. *Same as SOC/WGS 460.* *Rondini*

467. Multi-Media Memoir. (A) (H)
This course is an exploration of memoir through several media and genres—prose, poetry, performance art, photographs, film and theater. We also engage with the most recent "mnemonic theory," and our theoretical study takes form in essays that probe the curious genre of memoir–a genre that slips between literary and fact-based writing, between imaginary and nonfiction prose. The seminar provides a longer workshop or "studio" component in which you'll probe connections between assigned work and the writing of your own memories and experiences. Permission required. *Same as AMS 467.* *Willard*

462. Toni Morrison. (H)
This seminar will focus on Toni Morrison as a major African American and American writer. We will examine Morrison's oeuvre in both fiction and criticism, and explore how her aesthetics and vision, and her analyses of them, are informed by historical contexts and their racial, sexual, gendered, class, etc. impulses. Permission of the instructor required. *Same as ENG/WGS 462.* *Bernard*

491. Directed Reading.
A continuation of independent research directed by the Africana Studies staff. Prerequisite: AFS 490.

INTERDISCIPLINARY TOPICS COURSES (ALSO ELECTIVES)

Students may also select electives for the AFS major and minor from topics courses offered by the following departments: American Studies, Anthropology, Economics, English, Government, History, Judaic Studies, Music, Psychology, Religious Studies and Sociology. Topics courses taken in these departments will count toward the AFS major only if they primarily address issues surrounding Africa and the African Diaspora and are alternatively designated "AFS."

American Popular Music.
Climate Crisis, Human Health and Justice.
Gender and Sustainability.
History of Colonial Latin America.
Long History of Civil Rights.
Multi-Media Memoir - Race, Class, Sex in Movies.
Race and Gender in Mediterranean Migrant Film.
Race, Gender and State Violence.
Race and Inequality in the US.

AMERICAN STUDIES

Professor Dennis Deslippe, Chair

Dennis Deslippe	*Professor of American Studies and Women's, Gender and Sexuality Studies*
M. Alison Kibler (on leave Fall 2022)	*Professor of American Studies and Women's, Gender and Sexuality Studies*
Louise L. Stevenson	*Professor of History and American Studies*
Carla Willard	*Associate Professor of American Studies*
Cristina Perez	*Assistant Professor of American Studies*
Mark Villegas	*Assistant Professor of American Studies*
Daniel Frick (on leave Fall 2022)	*Director of the Writing Center and Senior Teaching Professor of American Studies, and Senior Adjunct Assistant Professor of English*

American Studies is a major for students who want to carve out their own path in the eclectic terrain of American culture. Unlike traditional majors, American Studies asks students to combine and cross disciplines in their study of American culture, past and present. American Studies explores the core narratives of the United States as well as the diversity of American social and cultural life. The American Studies Department teaches students to read critically, to articulate ideas clearly, to conduct research and to write effectively. It expects students to develop these abilities within an interdisciplinary curricular framework that requires them to encounter diverse peoples, types of cultural expression and patterns of social interaction. Students are involved in research and internship opportunities in the local community as well as in more traditional scholarship. The American Studies Department is committed to the advancement of these goals through effective teaching and active scholarship by its faculty. American Studies prepares students for a wide range of careers, including education, museums, nonprofit management, law, community organizing, media and public relations, marketing and branding.

A major in American Studies consists of 11 courses: AMS 100, AMS 350 and AMS 489; one class in global AMS—AMS 136, AMS 323 or an approved topics course; a thematic concentration of three courses, to be approved by the student's AMS adviser by the fall of the junior year; and four AMS electives or other courses from the list of approved courses. Of these four electives, one course must be in American arts and literature and five courses in the major must be at or above the 300 level.

The writing requirement in the American Studies major is met by completion of the normal courses required to complete the major. Majors intending to enter graduate or professional studies should see the chairperson for particular courses necessary or desirable to prepare for advanced study. Other courses, such as foreign languages and/or quantitative skills, may be required for students wishing to pursue graduate work.

Majors in American Studies have studied abroad in the following programs in recent years: Advanced Studies in England, Bath; IFSA-Butler University of Edinburgh; DIS-Study Abroad in Copenhagen; Macquarie University, Sydney, Australia; SIT Human Rights: Foundations, Challenges, and Advocacy; and SIT Study Abroad/IHP:Cities in the 21st Century. American Studies majors are also encouraged to consider the University of Sussex in England and Flinders University in Australia. See

the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

100. Introduction to American Studies. (S)
An interdisciplinary introduction to American identity. Examines expressions of national identity in arts and popular culture. Pays particular attention to race, ethnicity and gender from the 19th through the 21st centuries. *Perez*

105. Jazz. (A)
The history of jazz, from its roots to the present day, with emphasis on stylistic distinctions. Considers African and European contributions, blues types, New Orleans jazz, Harlem Stride, Swing, bebop, cool jazz, hard bop, free jazz, fusion, neo-classical, and acid jazz, touching on most major figures and their contributions. Each stylistic period is studied from an economic and sociological viewpoint with emphasis on form, texture, improvisation, harmony, rhythm, and timbre. *Same as AFS 105/MUS 105*. *Butterfield*

106. History of the Blues. (A)
Blues history from its origins to the Blues Revival of the 1960s. Emphasis on the Delta blues tradition of Charley Patton, Robert Johnson, and Muddy Waters. Additional topics include: oral formulaic composition; politics of race and sex in the blues; the blues as a "secular religion"; the music business; appropriations of blues style in jazz and rock; the ongoing function of the blues as a core signifier of "blackness" in American culture. *Same as AFS/MUS 106*. *Butterfield*

115. Introduction to Asian American Studies: War, Empire, and Migration. (H)
This course will provide a multidisciplinary approach to Asian American Studies. By examining literature, historical/sociological scholarship, films, and music, we will explore both dominant and lesser-known narratives representing Asian American refugees, mixed-race communities, and colonial diasporas. The interlinking themes of empire, colonial conquest, militarization, transnational labor, state-sanctioned violence, urbanization, and race and gender relations will emerge from studying Filipino and Japanese pidgin-speakers from the plantations of Hawai`i, Vietnamese American refugees, and Asian American anti-war radicals in the streets of San Francisco. Students are also invited to explore and document stories of local Asian American communities. *Villegas*

120. Introduction to Latinx Studies. (S)
This course considers key theoretical contributions that speak to the construction, expressions, and representations of Latinx identities in the US. We will take up an intersectional approach, one that emphasizes the diversity of Latinx experiences and the ways they are mediated by US and transnational understandings of race/ethnicity, gender, sexuality, nationality, and class. Of particular interest is how Latinx folks articulate fraught or ambivalent relationships to the US, to larger transnational communities, and to Latinidad itself. By way of method, the course will blend interdisciplinary scholarly and theoretical readings with a range of cultural texts that will allow us to deepen, extend, or complicate our understanding of Latinidad. *Perez*

136. U.S. Empire. (S)
From the Mexican War through World War II (1845–1945) the U.S. developed the intellectual and diplomatic arguments of empire while acquiring the territory necessary for achieving global predominance. This course examines this rise to world power, including territorial expansion, European diplomacy, world wars and the exertion of influence into Mexico from a historical perspective that includes both critics and supporters of U.S. world involvement. *Same as HIS 136*. *Stevenson*

150. Introduction to African American Studies. (S)
The development of the United States as a global and multiracial society. Topics can include the transatlantic slave trade in the 18th and 19th centuries; Pan Africanism, mass media in the African Diaspora; the Harlem Renaissance and Civil Rights movement into the 21st century. *Same as AFS 150*. *Willard*

167. American Spiritualities. (H)
Surveys the dominant tradition of American religious practice: spirituality. The goals of this course encompass the study of different forms of spirituality in the United States past and present. The course will familiarize you with mainstream as well as alternative spiritual practices, from Puritan Devotions and the Lakota Sundance to evangelicalism, political radicalism and various modes of artistic production. The course seeks to trace major outlines of development from past to present and to illuminate the meaning of spirituality for our time and in relation to American history. *Same as RST 167*. *Modern*

203. Cultural History of American Religion. (H)
Examines the relationship between religion and culture in the United States from approximately 1492 to the present. In addition to looking at liturgical forms of religion and surveying various religious movements and groups, we will explore 1) how cultural forms serve as vehicles of religious meaning; 2) how religious values are expressed and/or criticized in everyday social life; and 3) the interaction between religion and developments within the political, social, economic and philosophical spheres. *Same as RST 203*. *Modern*

213. Black American Film. (A)
An introduction to film studies using black film as a genre of Hollywood and independent film. Covers the work of Oscar Michaux through the "blaxploitation" films of the 1970s and into the 21st century. Explores films as social commentary in particular historical contexts. Particular attention is given to screen analysis of segregation, sexuality, class differences and more. *Same as AFS/FLM/WGS 213*. *Willard*

234. American Enemies (H)
Does the United States have a "paranoid style," as some historians claim? This class explores the tendency to identify, and the desire to eradicate, national enemies—both imaginary and real. Course units include the McCarthy Era, the Kennedy assassination, the Vietnam war, 9/11 and the war on terror. We will try to understand the varied sources of American paranoia and explore the truth of the old adage "Just because you're paranoid, doesn't mean that they aren't out to get you." *Frick*

235. U.S.-Mexico Borderlands. (NW) (S)
This course introduces students to the history of the present-day U.S.-Mexico border region. Although much of the course focuses on the past 150 years, we will also explore how early indigenous peoples lived in the region and interacted with the environment, and examine the legacy of colonialism in the region prior to the U.S.-Mexico War. S*ame as HIS 235*. *Shelton*

239. Hip Hop: The Global Politics of Culture. (H) (NW) (WP)
This course will engage in hip hop's "politics of authenticity" while also offering a primer on the participation and contributions of a variety of transnational, sexual, gender, and racial/ethnic constituents. Rightfully centering and honoring the genre's Afro-diasporic influences, we will examine debates involving transnationalism, gender, sexual, and racial boundaries in hip hop. We will also explore hip hop's global relevance, such as its sonic and cultural presence in reggaetón and its spread as a global dance form. Overall, this class will prompt students to untangle hip hop's seemingly contradictory ethos of "keeping it real" while simultaneously promoting broader ideals of cosmopolitanism and global commodification. *Same as MUS 239*. *Villegas*

243. American Art. (A)
Historical and aesthetic consideration of architecture, painting, decorative arts and sculpture produced in the United States from colonial settlement through the 1913 Armory Show. Course themes include the social functions of works of art, the relationship of U.S. and European cultures, the role of art in building a national identity, the development of an infrastructure of art institutions and the contrast and connection between popular and elite art. *Same as ART 243*. *Clapper*

251. Issues in Modern and Contemporary American Drama. (A)
A literary and theatrical examination of representative American Drama from the early twentieth century to the present, emphasizing developments since 1950. The focus of this study is on how and why Americans and American life have been depicted onstage as they have and the powerful effect this range of depictions has had on American identity and the American imagination. *Same as ENG/TND 251.* *C. Davis*

256. African American Literature I:
Declarations of Independence and the Narratives of Slavery (H)
This course covers African American narratives of slavery from the colonial period through the early 19th Century. The Declaration of Independence, the founding narrative of American selfhood and agency, provides the discursive background of the course. The Declaration did not mention Slavery, thereby erasing Slaves' experiences in the American narrative about peoplehood. We will engage the logic, rhetoric and contradictions of the document by pluralizing "declaration" to broaden and then examine how Slaves' oral narratives (the Spirituals, etc.) and texts (by Phyllis Wheatley, Oladuah Equaino, etc.) were figurative and literal declarations of independence that simultaneously question the Declaration's principles and ideology and affirm its transcendent meanings in the writers' discourses on Slavery, Black humanity and selfhood, race, the American Dream, etc. *Same as AFS/ENG/WGS 256.* *Bernard*

257. African American Literature II:
Meaning of the Veil and African American Identity. (H)
In The Souls of Black Folk (1903), the African American writer W. E. B. Du Bois introduces two concepts—the "veil" and "double-consciousness"—to explain the black experience in America. This course, which covers African American literature from Reconstruction to the Harlem Renaissance, the Black Aesthetic/Black Power movement and beyond, will examine the recurrence of the veil metaphor (and its synonyms) generally and engage Du Bois's formulation of the concept specifically in the cultural and historical contexts that frame this period's literature. We will explore how writers (Paul Laurence Dunbar, Langston Hughes, Zora Neale Hurston, Ralph Ellison, Toni Morrison, etc.) engage topics (race, gender, music, identity, etc.) that reinforce, expand and/or complicate Du Bois's metaphor. *Same as AFS/ENG/WGS 257.* *Bernard*

261. North American Indians of the Eastern Woodlands. (NW) (S) (WP)
A survey of the past and present diversity of indigenous peoples in the Eastern Woodlands of the United States and Canada. The focus is on the prehistoric archaeology of the region, the consequences of European colonization on native groups and the struggles and achievements of indigenous peoples today. An examination of issues ranging from the controversy that surrounds the initial settlement of the Eastern Woodlands by Native Americans to contemporary debates on federal recognition and sovereignty. Prerequisite: ANT 100 or 102. *Same as ANT 261.*
M. A. Levine

282. Vietnam and the Cold War. (S) (WP)
This course examines the longest armed conflict in our history, the Vietnamese-American War that began in 1946, when the United States began aiding the French effort to take back control of their colony in Indochina, and ended with U.S. defeat in 1975. It places that conflict in the larger context of national liberation in the Third World (the formerly colonial regions of Africa, Asia, and Latin America). *Same as HIS 282.*
Gosse

301. Pops & Jelly Roll:
New Orleans and Its Music in the Early Twentieth Century. (A)
An examination of Louis Armstrong and Jelly Roll Morton's New Orleans. The course evaluates their music and the more general style of early New Orleans jazz in relation to the geographical, social, political, and economic dynamics of that great American city in the early 20th century. Particular attention will be given to the social and musical interactions among New Orleans' disparate ethnic groups that led to the formation of a unique style of jazz derived from ragtime, blues and the ubiquitous marching band music from that era. *Same as AFS 301 and MUS 301.* *Butterfield*

302. Bebop. (A)
A history of the bebop movement in jazz of the 1940s and '50s. Special attention given to the social, economic, and political conditions that led a small handful of musicians to abandon Swing Era big bands in favor of the small combos that formed out of Harlem jam sessions between 1941-1943. Covers distinguishing features of the bebop style through an examination of the music of Charlie Parker, Dizzy Gillespie, Thelonious Monk, and others. Concludes with an evaluation of the social and political meanings of bebop and its historical legacy. *Same as AFS/MUS 302* *Butterfield*

303. As Seen on TV: History as Media Event. (H)
"Where were you when…?" Whether the Kennedy assassination, Richard Nixon's resignation, the shooting of Ronald Reagan or the fall of the Berlin wall, most Baby Boomer Americans would answer: "I was watching it on TV." This course will explore the representation of history-making moments in the mass media, with a focus on the second half of the 20th century. We will explore how television covered the event at the time, how that coverage shaped the first draft of history, and how it has participated in shaping the cultural memory of the event in the years since. Course units include Edward R. Murrow's duel with Senator Joe McCarthy, the JFK assassination, Vietnam, Watergate, the O.J. Simpson case, and 9/11. *Same as FLM 303.* *Frick*

310. American Masculinities. (S)
This course explores the importance of masculinity and its various constructions in American history and the contemporary period. We begin by examining the theoretical and historical foundations of American masculinities. We will focus on key ways in which men (and women) sustain and recreate masculinities. Topics include manhood and the workplace, politics, sports, courtship, fatherhood, military, immigration and ethnicity, crime and prisons and religion. *Same as HIS/WGS 310.*
Deslippe

316. Harlem Renaissance. (H)
The Harlem Renaissance represented an explosion of Black cultural, economic and political activity in the first and second decades of the twentieth century. Fifty years after emancipation, African Americans were still struggling for equality and acceptance from White America. The cultural products of the period -- events, writings, music, theater, and literature, for example -- represented a desire by African Americans to forge a new identity and find a place in American democracy. We will explore how African Americans used these cultural products to express their history, experiences, predicaments, hopes and racial consciousness and pride. In this course, we will examine some of the writers and the texts of the period. *Same as ENG/AFS 316.* *Bernard*

320. American Women and Social Movements Since 1900. (S)
An interdisciplinary study of the various ways women have participated in American society and politics. Topics include the suffrage movement, modern modes of political participation and the New Deal and World War II. Critical analysis of the meaning of feminism and special attention to the post-1945 period. *Same as HIS/WGS 320.* *Deslippe*

322. Buddhism in North America. (H)
Focuses on some of the distinctive forms that Buddhism has taken in North America. Discusses a number of traditions, including Theravada, Zen and Tibetan Buddhism, comparing their American versions with those in Asia and addressing the transformations of various Buddhist traditions to accommodate American lifestyles and views. Also addresses a number of issues pertinent to Buddhism in America and the West, such as Buddhist identity, ethnicity, gender issues, authority and social activism. *Same as RST 322.* *McMahan*

323. Cuba and the United States: The Closest of Strangers. (S)
This course examines the long history of relations between North Americans and Cubans, two peoples separated by only 90 miles. Our topics will range from baseball to guerrilla warfare, from the Mambo to the Missile Crisis. This history includes a shared commitment to anticolonial liberation; annexationist schemes among Southern slaveholders; repeated military interventions by the United States; solidarity from the U.S. with various Cuban Revolutions, including but not limited to Fidel Castro's; and two hundred years of cultural contact between African Americans and Afro-Cubans that has profoundly influenced U.S. culture, music, and sports. *Same as AFS/HIS 323.* *Gosse*

339. Civil War and Reconstruction. (S)
Interdisciplinary course asks students to investigate the causes, events and results of the American Civil War and its enduring impact on American life. The class usually takes one all-day trip to battlefields. No prerequisite, although some background in 19th-century history is helpful. *Same as HIS 339.* *Stevenson*

350. Studying the American Experience. (S)
An examination of the principal methods and paradigms used in conceptualizing, researching and writing in American Studies. Usually completed in the junior year. Topics vary. *Deslippe*

353. American Photography. (A)
Soon after the invention of photography, photographic images quickly constituted much of visual culture—either national or global. Sometimes photographs were made with high artistic intention, but, far more often, not. This seminar will examine diverse topics in 19th and 20th-century American photographic history, from vernacular images produced for the masses (daguerreotypes, tintypes, snapshots) to what have now become nearly iconic photographs produced either for documentary purposes or to make artistic, self-expressive statements. We will consider the work of unknown makers as well as that produced by celebrated photographers such as Alfred Stieglitz, Edward Weston, Walker Evans, Ansel Adams, Dorothea Lange, Robert Frank, and Robert Adams. *Same as ART 353.* *Kent*

354. Gender and Race in Ethnic Studies Film.
"Gender and Race in Ethnic Studies Film" examines the concept of Ethnic Studies as an educational curriculum emerging from social movements. In an effort to understand Ethnic Studies, we will explore the media productions by and about people of color in relation to U.S. social unrests of the late-1960s, 1970s, and the aftermath of these decades. We will focus on three groups: U.S. Latinos, African Americans, and Asian Americans. *Same as AFS/FLM/WGS 354.* *Villegas*

381. 9/11 and the War on Terror. (H)
This course will look at representations in popular culture of 9/11 and the subsequent war on terror. Starting with television news coverage from September 11, 2001, we will also analyze nonfiction accounts (narrative and graphic), as well as documentaries, commercial films, and television programs that deal with these traumatic and defining moments. From these texts, we will come to understand that the ways in which we remember 9/11 and the war on terror play a role in shaping our understanding of the United States and its place on the world stage. *Frick*

385. Gender at Work. (S)
What is women's work? How has it changed over the course of American history? How is it valued? This course explores the world of women's work by comparing it to "men's" work. We will focus on wage earning, caregiving, sex work, housework, "double days" and "glass ceilings." We will especially consider women's strategies of survival and resistance from various demographic, racial and ethnic groups. *Same as BOS/WGS 385.* *Deslippe*

390. Independent Study.

391. Directed Reading.
Tutorial. Topics adapted to the knowledge and interests of the individual student. Admission by consent of the instructor.

420. Selected Topics in the Cultural and Intellectual History of the United States. (S)
Recent topics include: "Lincoln" and "National Discourse."
Same as HIS 420. *Stevenson*

467. Multi-Media Memoir. (A) (H)
This course is an exploration of memoir through several media and genres—prose, poetry, performance art, photographs, film and theater. We also engage with the most recent "mnemonic theory," and our theoretical study takes form in essays that probe the curious genre of memoir–a genre that slips between literary and fact-based writing, between imaginary and nonfiction prose. The seminar provides a longer workshop or "studio" component in which you'll probe connections between assigned work and the writing of your own memories and experiences. Permission required. *Willard*

489. Senior Seminar. (S)
A capstone or integrative seminar. Topics vary. *Kibler*

490. Independent Study.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

American Popular Music.
Border Law and Policy.
"Hamilton" and History.
Latinx Representations in U.S. Pop Culture.
Lincoln.
Multi-Media Memoir: Race, Class, Sex in Movies.
Religion, Politics and American History.
Reproduction, Law and Policy in the U.S.
Revolutionary America 1750-1800.
WWI, F&M, U.S. and the World.

APPROVED COURSES FOR AMERICAN STUDIES ELECTIVES

The courses listed below have been approved as American Studies electives. They have been selected on the basis of being self-conscious about their American subject matter as a problem or issue or because of the questions they raise about American identity. Other courses that meet these criteria, such as topics courses or courses taught by visiting professors, may be approved by the chairperson of American Studies. Students should be aware that some of these courses have prerequisites.

ARTS AND HUMANITIES

AMS—Other elective American Studies courses, if appropriate.
ART 227. Lancaster Architecture.
ART 251. Modern Art Since 1900.
ENG 206. American Literature I.
ENG 207. American Literature II.
ENG 208. American Literature III.
ENG 250. Contemporary American Short Story.
ENG 265. Contemporary Graphic Novel.
ENG 461–469. Author seminars, where appropriate.

SOCIAL SCIENCES

AMS—Other elective American Studies courses, if appropriate.
BOS 332. Law, Ethics and Society.
ENE 216. Environmental Policy.
ENE 245. American Nature Essays.
ENE 313. Nuclear Power, Weapons and Waste Disposal.
ENE 320. International Environmental Law.
GOV 208. American Presidency.
GOV 219. City and State Gov.
GOV 305. Public Policy Implementation.
GOV 309. The Congress.
GOV 310 Campaigns and Elections.
GOV 314. American Constitution.
GOV 315. Civil Rights and Civil Liberties.
GOV 318. Media and Politics.
GOV 330 Foreign Policy Analysis
GOV 370, 470. Topics in American Politics.
GOV 411. Presidential Character.
HIS 233. African American History.
HIS 334. American South.
HIS 409, 410, 411. Selected Studies/Social and Political History of North America.
HIS 408, 420. Selected Studies/Intellectual and Cultural History of the United States.

PBH 303. Problem-Solving Courts/Drug Court.
PBH 415. Public Health Research: You Are What You Eat?
PBH 420. Public Health Research: Pregnancy Outcomes in American Women.
RST 313. African American Religion
SOC 330. Sociology of Medicine.
SOC 350. Sociology of Gender.
SOC 360. Race and Ethnic Relations.
SOC 364. Sociology of the Family.
SOC 384. Urban Education.

ANTHROPOLOGY

Professor Scott Smith, Chair

Mary Ann Levine	*Professor of Anthropology*
Bridget Guarasci	*Associate Professor of Anthropology*
Scott C. Smith	*Associate Professor of Anthropology*
Adeem Suhail	*Assistant Professor of Anthropology*
Thomas C. Hart	*Adjunct Assistant Professor of Anthropology*
Stephanie Palazzo	*Adjunct Instructor of Anthropology*
Monica Cable	*Director of Fellowships & East Asia Recruitment and Adjunct Assistant Teaching Professor of Anthropology*

The study of anthropology leads to a knowledge of the world's cultural, social and biological diversity in the past and present. Although the focus of such knowledge is the entirety of the human experience, students of anthropology apply their comparative perspective to reflect upon their own lives, beliefs and taken-for-granted assumptions. In this sense, anthropology provides a strong foundation for "the examined life," a Socratic ideal that is one of the founding inspirations of the liberal arts.

Anthropology, the study of humanity, is unique among academic disciplines in being simultaneously a social science, a natural science and one of the humanities. As one noted anthropologist has remarked: "Anthropology is the most scientific of the humanities and the most humanistic of the sciences."

Although it is true that many anthropologists spend much of their time studying and writing about the "small picture"—a remote village, a single archaeological site, a particular myth—it is also true that the discipline is concerned with the biggest, most general, picture. General questions about the "natural" roles of parents, the meaning of work, the function of ritual and the origins of inequality are typically anthropological. All anthropologists, no matter what their theoretical persuasions or topical specializations, affirm the value of holism, viewing all aspects of human thought and action as interrelated. This holistic outlook is perfectly consistent with the nature and goals of liberal education in the modern world. Not only does the anthropology major provide a strong background in critical thinking, analysis and writing, but the anthropology graduate also generally comes away with a broad appreciation for global diversity and a deep sympathy for our fellow humans.

The Franklin & Marshall Anthropology major seeks to balance the learning of factual content, theoretical analysis and actual empirical research in either cultural anthropology or archaeology. Our majors learn about anthropology, but they also experience what it means to do anthropology.

A major in Anthropology consists of 10 courses: 100, 102, 200; one culture-area course; two 300-level courses; 410 (for those mainly interested in social anthropology) or 411 (for those mainly interested in archaeology); and three electives. We also encourage our majors to expand the projects begun in their Methods course (410 or 411) into full-scale Independent Studies projects based upon original field research. Students should discuss research opportunities with their departmental advisers prior to the spring semester of their junior year. The writing requirement in the Anthropology major is met by completion of the normal courses required to complete the major.

A minor in Anthropology consists of six courses in the department: 100; 102; 200; one culture-area course; one 300-level course; and one elective.

Majors in the Department of Anthropology have studied abroad in the following programs in recent years: School for International Training (SIT); Butler University's Institute for Study Abroad; Institute for the International Education of Students (IES); Council on International Educational Exchange; Institute for Field Research. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

100. Social Anthropology. (S) (WP)
An examination of fundamental categories and practices in social anthropology, giving special attention to anthropological methodologies, basic forms of social organization, and the ways human beings generate particular social meanings through their aesthetic, economic, religious, and political activities. *Guarasci, Suhail*

102. Introduction to Archaeology. (S)
An introductory survey of historic and prehistoric archaeology that examines how knowledge about the past is created, debated and sometimes abused. A survey of world prehistory from the earliest hominids through the rise of the first "civilizations" to expose the range of variation in past human social and political organization. Provides a global and comparative approach to better understand and appreciate this diversity. As we learn about the messages and lessons that archaeology has to offer, we should begin to think critically about our own society and reflect on the possibilities for its improvement. *Smith, Levine, Hart*

170–179. Topics in Anthropology. (S)
Lecture courses or seminars on theoretical or ethnographic subjects of current interest.

200. Anthropological Theory. (S)
The history of anthropological thought up to the present. The meaning and purpose of thinking theoretically. This course serves as the prerequisite to most 300-level courses in Anthropology. Prerequisite: ANT 100 or permission of the instructor. *Suhail*

253. Andean Archaeology. (NW) (S) (WP) (Culture Area)
This course explores the cultural diversity of the central Andes of South America from the original arrival of migrants over 12,000 years ago to contact with Spanish conquistadors in the early 16th century. Geographically, the course will focus on prehistoric cultures that occupied the modern countries of Peru, Bolivia, and Ecuador. Themes include: debates about the initial migration to the region, early food production, the origins of social complexity, ceremonialism, state formation and disintegration, and conquest by Spain. Prerequisites: ANT100, or ANT102 or permission of instructor. *Smith*

257. People and Cultures of the Andes. (NW) (S) (WP) (Culture Area)
This course focuses on the mountainous Andean region of South America and provides an overview of Andean society from AD 1500 to present. We will examine the colonial matrix in which Iberian and Andean social, political, and cultural forms came together. This course uses ethnographies, contact period chronicles, indigenous narratives, novels, testimonials, and film about contemporary Andean society to address issues of colonialism, race, class, ethnicity, gender, and human-environment relationships. Geographically, this course focuses on the region encompassed by the modern nations of Ecuador, Peru, and Bolivia. Prerequisite: ANT 100, ANT 102, or permission of the instructor. *Smith*

258. People and Cultures of East Asia. (NW) (S) (WP) (Culture Area)
This course introduces students to the cultures of China, Korea, and Japan. Through primary sources (in translation), films, and ethnographies, this course will examine the shared cultural backgrounds of the region as well as how each country has made modifications to fit their own society. Topics include the mainstream philosophical traditions of Confucianism, Daoism, and Buddhism, as well as such complex issues as the individual and society, ethnicity and nationalism, and gender. *Cable*

259. Anthropology of the Middle East. (NW) (S) (WP) (Culture Area)
How do we understand the Middle East beyond the politics of oil and war? This class is designed to introduce students to the cultural production of the region between North Africa and West Asia, between the Atlantic and Central Asia, commonly known as the Middle East. The course begins with the study of colonial approaches to the region and ends with a consideration of recent work that defines the Middle East anew by emphasizing the religious, commercial, and political networks that have historically connected urban and rural locations in regionally definitive way. By moving between primary source documents and scholarly analysis in class discussions and written course assignments, students will learn to be ethnographers and thereby sharpen their own critical interpretive abilities. At the end of the course, students will have foundational knowledge of the Middle East as both a geographic and ideological location. Prerequisite: ANT100. *Guarasci*

260. Archaeology of North America. (NW) (S) (Culture Area)
This course surveys the prehistory of Native American peoples in Canada and the United States from their arrival on this continent more than 12,000 years ago to their encounters with Europeans. Through the use of a regional approach to the study of indigenous peoples, this course will survey a wide variety of prehistoric Native American peoples including those in the Arctic, Northwest coast, Southwest and Northeast. By uncovering the diversity of Native American lifeways in the past, this course provides the foundation for understanding the rich heritage of contemporary Native American peoples. Prerequisites: ANT100, ANT102 or permission of the instructor. *Levine*

261. North American Indians of the Eastern Woodlands. (NW) (S) (WP) (Culture Area)
A survey of the past and present diversity of indigenous peoples in the Eastern Woodlands of the United States and Canada. The focus is on the prehistoric archaeology of the region, the consequences of European colonization on native groups and the struggles and achievements of indigenous peoples today. An examination of issues ranging from the controversy that surrounds the initial settlement of the Eastern Woodlands by Native Americans to contemporary debates on federal recognition and sovereignty. Prerequisite: ANT 100 or 102. *Same as AMS 261.* *Levine*

267. Peoples and Cultures of Africa. (NW) (S) (Culture Area)
Social and historical practices of various African cultures, with a special emphasis on sub-Saharan groups. Topics considered will include the intersections between political economy, performances, religion, art, and popular media on the continent. Prerequisite: ANT 100.
Same as AFS 267. *Staff*

269. Prehistory of the Near East. (NW) (S) (Culture Area)
This course explores the cultural and social diversity of the ancient Near East, tracing cultural developments from early post-glacial times through the end of the Iron Age. Topics discussed will include the development of agriculture and Neolithic lifeways, the rise of the world's earliest cities, the development of social complexity, state formation and expansion, the development of writing systems, and the politics of cultural heritage, among others. Prerequisite: ANT102, or ANT100, or permission of instructor. *Hart*

270–279. Topics in Anthropology. (S)
Lecture courses or seminars on theoretical or ethnographic subjects of current interest.

290. Independent Study.

301. Archaeology of Inequality. (S)
To what extent are inequality and domination inherent or "natural" characteristics of social life? If these phenomena are not intrinsic then how, and in which contexts, do they arise? What are the implications of these phenomena and how do people resist hierarchies? This course examines the development of economic, gender, and racial hierarchies from an archaeological perspective. Archaeology is well suited to address these questions because it examines change and development in social life over long periods of time. Prerequisite: ANT 200 or permission of instructor.
Smith

335. Power. (NW) (S)
This seminar investigates the formation of power as an act of creativity. It does so by using the concept of "frontier" to think about power in formation. We will examine three principle frontiers of power: capital, science, and art. Frontiers of power are inchoate spaces, spaces in formation. Because of its liminal nature, wild abuses of power can happen in the frontier, as during the U.S. period of manifest destiny when settler colonists expanded into Native lands. At the same time, the frontier can be a space of unbridled creativity. In frontier spaces, creativity and power work in relation. It is this relationship that we will explore in this class. As students explore the relationships of creativity and power, they will also interrogate how anthropological works engaging the topic are themselves innovative texts, thereby developing a dialogic investigation that engages texts both as form and content. The final course assignment challenges students to put their literary investigation into practice by analyzing power within a creative medium of their choice: students will prepare an original piece of art, a musical composition, a work of fiction, an entrepreneurial endeavor, or an ethnography that elaborates upon the themes explored in seminar. Prerequisites: ANT100 and ANT200. *Guarasci*

337. Anthropology of Environment. (NW) (S)
The environment is a definitive problem of the twenty-first century. Struggles to counteract climate change, international initiatives to conserve biodiversity, legislation to curb industrial pollution, and protocol for natural resource appropriation all express a commitment to care for the environment. This class troubles the waters: What do we mean by environment? What histories of nature, power, and capital define environment? What are the contemporary economic and political implications of this environmental ethos? In this course, students will grapple with such questions to achieve competency in the anthropology of environment. Prerequisite: ANT100. *Same as ENE337.* *Guarasci*

360. Spatial Archaeology. (S)
The analysis of ancient spatial orders has been central to the archaeological study of past social organization and dynamics. This course explores the ways in which archaeologists have studied spatial organization at various scales, from regions to buildings. Topics covered include landscape archaeology, social meanings of space, urbanism, the archaeology of community, archaeological approaches to the analysis of public architecture, and household archaeology. Case studies may include Classic period Maya, ancient Peru, Sub-Saharan Africa, Neolithic Britain, Egypt, the Levant, and North America. Prerequisite: ANT 200 or permission of the instructor. *Smith*

365. Queens, Goddesses and Archaeology. (S)
This course will consider how archaeologists examine gender and interpret the roles of women in ancient subsistence economies, politics and religions. To achieve this goal we will discuss the roles of women in egalitarian and stratified societies and explore the actions and status of both high-ranking and everyday women in the ancient world. Prerequisites: ANT 100, ANT 102, ANT 200 or permission of the instructor. *Same as WGS 365*. *Levine*

370–379. Topics in Anthropology. (S)
Lecture courses or seminars on theoretical or ethnographic subjects of current interest.

380. Archaeology of Colonialism in Native North America. (S) (NW)
Archaeology is well poised to shed light on the social and historical processes associated with colonialism and the impact that European colonization had on Native Americans. By considering five centuries of interaction between Native Americans and Europeans we will examine the diversity of experiences pertaining to culture change and continuity, depopulation, accommodation, hybridization, resistance, and revolt. By exploring a wide range of archaeological case studies of colonial-indigenous interactions we will also examine how colonialism was experienced at multiple levels ranging from the individual to large populations. Prerequisites: ANT 100, ANT 102 and ANT 200. *Levine*

390. Independent Study.

410. Anthropological Methods. (S)
A practicum in anthropological fieldwork, including exercises in participant observation, interviewing, framing a research question, analysis and interpretation of data. Prerequisite: ANT 200. *Guarasci*

411. Archaeological Methods. (S)
This course will provide students with hands-on training in archaeological field and laboratory methods. In the first half of the semester, participants will travel to a local field site and learn techniques of archaeological data recovery, including survey, mapping and excavation. In the second half of the course, the focus will be on lab analysis, including the processing and interpretation of artifacts recovered during the field component of the course. Special attention will be given to computer techniques applicable to archaeological analysis. Students should expect to spend time outdoors and to dedicate at least one or two weekend days to field trips. *Levine, Smith*

490. Independent Study.
Senior level independent study directed by the Anthropology staff. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Anthropology of the Violent.
Archaeology of the British Isles.
Anthropology of Music.
Cult(ures) of Extinction.
Medical Anthropology.

ARABIC LANGUAGE

Arabic is a rich and varied language spoken in over two dozen countries in the Middle East and North Africa. The Arabic Program at Arabic Franklin & Marshall focuses on developing students' communication skills in both spoken dialects (Egyptian) and Modern Standard Arabic (MSA) used in more formal contexts. Students begin reading and writing in Arabic during their first semester of study and continue to improve these skills along with their speaking and listening abilities throughout the Intermediate and Advanced level courses. Courses at all levels regularly integrate authentic materials and technology in order to introduce students to the history, politics, and culture of the Arab world. Students are strongly advised to take Arabic 101, 102, 201 and 202 prior to a semester of study abroad in an Arabic-speaking country. Most students who study abroad attend the CET program in Amman, Jordan or the Arabic Program at Middlebury Language Schools.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives.

101. Beginning Arabic I.
In this introductory course, students develop their oral communication skills in both colloquial and Modern Standard Arabic while learning how to read and write Arabic. By the end of the semester students will be able to use appropriate greetings and traditional expressions, introduce themselves and talk about their family and studies. For students with no prior knowledge of Arabic.

102. Beginning Arabic II.
This course is a continued introduction to the Arabic language in a cultural context, with an emphasis on expanding students' vocabulary and grammatical knowledge. Students learn how to speak in the past and future tenses in addition to developing an understanding of the root and pattern system. Prerequisite: ARB101 or placement by director of Arabic Program or instructor.

201. Intermediate Arabic I. (NW) (LS)
The second year Arabic course continues to build on the skills and materials presented in Beginning Arabic II. It takes a four-skills approach with emphasis on listening, speaking, reading and writing. During the semester, students continue to expand their knowledge of grammatical concepts and vocabulary in order to be able to speak, write and read about more complex political, historical, and cultural subjects. Prerequisite: ARB 102 or placement by director of Arabic Program or instructor.

202. Intermediate Arabic II. (NW) (LS)
The fourth semester Arabic course continues and builds on the skills and materials presented in Intermediate Arabic I. It takes a four-skills approach with emphasis on listening, speaking, reading and writing. Prerequisite: ARB 201 (formerly ARB 271) or placement by director of Arabic Program or instructor.

218. Narrative Journeys in Arabic Literature. (H) (NW) (WP)
This course introduces students to a variety of narratives in different literary genres from the Arab world. The organizing theme of this course is that of the journey, whether it be a physical trek through the desert or a metaphorical one such as an inward psychological quest. Students will encounter narratives by both male and female writers from various parts of the Arab world and from different periods of Arabic literary history. All texts are translated from the Arabic into English. *Same as AFS/LIT 218*.

301. Advanced Arabic I. (NW) (LS)
The third year of Arabic builds on the material covered in Arabic 202 or Intermediate Arabic II. The goal of this course is to focus in more detail on particular grammar concepts, building students' vocabulary and ability to utilize the root and verb pattern system to understand and form new vocabulary. This course also develops students' listening skills, understanding certain nuances of texts, exposure to Middle Eastern culture and history, and ability to speak in depth on a variety of topics with confidence. Prerequisite: ARB 202 or placement by director or instructor.

302. Advanced Arabic II. (NW) (LS)
The second semester of third year Arabic builds on the material covered in Arabic 301 or Advanced Arabic I. This course also goes into more depth regarding certain grammatical concepts, building students' ability to discuss a variety of topics through the use of new vocabulary and expressions or conjunctions. Students continue to be exposed to cultural and historical aspects of the Arab world through written texts and listening exercises. In addition to this, the course underlines the importance of communication through, for example, class discussion and group exercises. Prerequisite: ARB 301 or placement by director or instructor.

ART, ART HISTORY AND FILM

Professor Jeremy Moss, Chair

Dirk Eitzen	*Professor of Film and Media*
Richard K. Kent	*Professor of Art History*
Jun-Cheng Liu	*Professor of Art*
Amelia Rauser	*Professor of Art History, Associate Dean of the Faculty*
Linda S. Aleci	*Associate Professor of Art History*
Michael Clapper	*Associate Professor of Art History*
John Holmgren	*Associate Professor of Art*
Kostis Kourelis	*Associate Professor of Art History*
Magnolia Laurie	*Associate Professor of Art*
Jeremy Moss	*Associate Professor of Film and Media*
Sandra E. Lee	*Assistant Professor of Art*
Carol Hickey	*Senior Adjunct Instructor of Architecture*
Caitlyn Bishop	*Adjunct Professor of Art*
William Hutson	*Jennie Brown Cook and Betsy Hess Cook Distinguished Artist-in-Residence*

The making of art, and the study of its visual traditions, takes place at the intersection of culture, material and digital practices, and history. The Department of Art and Art History affirms the centrality of the visual and material to a liberal arts education. Thus we engage students in the processes of art making and in the historical analysis of art and architecture as the gateway to larger endeavors of knowledge: considering such issues as personal and public life, religious and secular practices, political activism and cultural power, the local and global, and transformations of visual experience over time.

The Department of Art and Art History provides the flexibility for students to design a concentration in Studio Art, Art History, or a focused combination of the two. Our coursework encourages students to make creative, innovative connections across disciplines. Classes are taught in a diverse range of spaces, from the classroom and the studio to museums and field sites. Art and Art History students benefit from an array of campus resources, including interdisciplinary programs, international programs, and digital initiatives. Through our partnership with the Phillips Museum of Art, senior majors in Studio Art have the chance to learn how to design and exhibit their work, while Art History students have hands-on curatorial opportunities and exposure to a wide-ranging collection. The city of Lancaster offers a rich urban environment for our architectural courses, as well as abundant resources for archival study and local history. Franklin & Marshall's proximity to Philadelphia, Baltimore, Washington D.C., and New York allows students to have access to some of the most important collections of art in the country; the department schedules regular field trips to these collections.

We anchor our department mission in the ideals of a liberal arts education, and our program establishes a sound foundation for a range of professional paths. Our majors have successfully undertaken advanced study at excellent graduate programs in art history, studio art, and architecture. Our majors develop habits of mind and innovative approaches to considering intellectual and visual problems that enable them to embark on diverse careers. Department alumni have developed successful careers as museum professionals, conservators, preservation professionals, and appraisers. They work as web and graphic designers, restaurateurs, and as cutting-edge fashion and video-game designers. They practice as architects, lawyers, and doctors. Because we pride ourselves in training students in ways that emphasize the interdisciplinary, the local and the global, as well as a commitment to community, we anticipate that our future alumni will forge careers in areas that we have yet to imagine.

Students who major or minor in art elect either an art history or a studio concentration. The major consists of 11 courses in either of two possible combinations, as follows:

STUDIO ART

Eleven courses are required for the studio art major:

Seven core courses are required:
One introductory course in drawing, ART 114;
One introductory course in sculpture, ART 116;
One course in photography, ART 142 (can be satisfied with ART 242);
One introductory course in 2-D design, ART 112;
One art history survey, ART 103;
One painting course, ART 222;
The advanced seminar in studio art practices, ART 462, one full credit.

In addition, students will work closely with their major advisers to choose four electives with which they can deepen their study in art history, create an area of special focus within studio art, or investigate courses of interest. Of these four electives, two are 200-level courses in studio, film, or art history; the other two are 300-level studio courses. Faculty advisers will help students construct a coherent cluster of courses for the area of special focus; this thematic cluster should be approved by advisers in the fall of students' junior year. Advisers may approve courses in other departments as part of this cluster. Some possible areas of focus include: advanced painting; advanced sculpture; design and the environment; architecture/urbanism; and technology and image-making.

All studio art majors are required to present their work in the Senior Exhibition at the Phillips Museum. Preparation for the exhibition, guided and evaluated by Art major advisers and the professor teaching the ART 462 Studio Capstone course, includes a non-credit portfolio review in the fall semester and the required capstone course in the spring.

The writing requirement for majors concentrating in studio art is met by earning a minimum of "C" in ART 103, or in one seminar offered by the department.

ART HISTORY

Eleven courses are required for the art history major:

Eight core courses are required:
ART 103. Introduction to Western Art;
ART 114. Introductory Drawing;
CLS 115. Greek Art and Archaeology or CLS 117 Roman Art and Archaeology;
One course in Asian art history, ART 105, 281 or 283;
One course in architectural history, ART 121, 123, 211, 219, 227;
ART 231. Art and Architecture of the Italian Renaissance;
One course in modern art history (ART 241, 243, or 251);
ART 461, the advanced seminar in art history.

In addition, students will choose three electives with which they can deepen their study of studio art, create an area of special focus within art history, or investigate courses of interest. At least one of these three electives must be at or above the 300-level. Faculty advisers will help students construct a coherent cluster of courses for the area of special focus; courses in other departments may also be appropriate as part of this cluster. Some possible areas of focus include: Asian art; early modern art; 19th-century art; American art; architecture/urbanism; art and archaeology; and technology and image-making.

The writing requirement for majors concentrating in art history is met by earning a minimum grade of "C" in one seminar offered by the department.

The minor consists of six courses, as follows:

THE STUDIO MINOR

Two courses:
ART 103. Introduction to Western Art;
ART 114. Introductory Drawing;

Plus four other courses in studio art, chosen in consultation with an adviser, with at least one at or above the 300-level.

THE ART HISTORY MINOR

Three introductory courses:
ART 103. Introduction to Western Art;
ART 105. Introduction to Asian Art;
ART 114. Introductory Drawing.

Plus three other courses in art history, chosen in consultation with an adviser, with at least one at or above the 300-level.

FILM & MEDIA

A major in Film & Media provides students with a core foundation in moving image history, theory, and practice. Our courses help students develop the ability to think visually, as well as to discuss and write about cinema and the media arts with nuance and sophistication. Students in the program develop skills in media analysis, historical research, and theoretical application. Our students also make creative work in a range of modes and media, from storytelling with digital video to experimental forms on film. The program propels students to actively engage and explore social, cultural, and systemic questions and problems, to use cameras and screens to reconsider and deconstruct existing structures and norms.

A Film & Media major consists of ten courses.

Four foundational courses:
FLM 110 Intro to Film and Media
FLM 215 Motion Picture History
FLM 226 Motion Picture Production
FLM 311 Visual Thinking

One of two 300-level creative production workshops:
FLM 320 Narrative and Collaboration
FLM 324 Alternative Forms and Practices

One of two 300-level hybrid history/production courses:
FLM 330 Experimental Film and Video
FLM 332 Documentary Film and Video

One 400-level course in theoretical or practical methodologies:
FLM 440 Advanced Topic in Film and Media

Three electives from the following options:

ART 142 Digital Photography I; FLM 261 Writing for the Screen; FLM 320 Narrative and Collaboration or FLM 324 Alternative Forms and Practices; FLM 330 Experimental Film and Video or FLM 332 Documentary Film and Video; FLM 341 Special Topic in Film and Media; FLM 440 Advanced Topic in Film and Media; GOV 318 Media and Politics; AMS 213 Black American Film; TND 345 Movement and Media; AMS 354 Race and Gender in Ethnic Studies Film; and other Film and Media courses approved by the academic advisor.

One DEI-designated course:

Film & Media majors must include among these 10 courses, or in addition to them, at least one media-related course that focuses on diversity, equity and inclusion. The DEI course may overlap with another required course for the major: an elective or an appropriate topic in FLM 341 or FLM 440. Each student will work with their advisor to designate a course that fulfills this requirement.

A **minor** in Film and Media consists of six courses.

FLM 110 Intro to Film and Media
FLM 215 Motion Picture History
FLM 226 Motion Picture Production
FLM 311 Visual Thinking
Two electives

A **joint major** in Film and Media consists of eight courses.

FLM 110 Intro to Film and Media
FLM 215 Motion Picture History
FLM 226 Motion Picture Production
FLM 311 Visual Thinking
FLM 320 Narrative and Collaboration or FLM 324 Alternative Forms and Practices
FLM 330 Experimental Film and Video or FLM 332 Documentary Film and Video
FLM 440 Advanced Topic in Film and Media
One elective

To be considered for departmental honors in Art and Art History, graduating seniors, besides meeting the College's general requirements for honors, must complete a substantial project, usually evolving from a fall semester course or independent study and continuing in an independent study in the spring. Students interested in pursuing departmental honors should consult with their academic adviser and obtain a copy of the department's detailed guidelines.

Majors in the Department of Art and Art History have studied abroad in the following programs in recent years: Butler University England and Scotland; IAU France; IES Austria and Spain; Syracuse University Italy and Spain; Temple University in Rome; SACI Academic Semester Abroad Program. See the International Programs section of the Catalog for further information.

Majors in Film & Media regularly study abroad at the Film and TV School of the Academy of Performing Arts (FAMU) in Prague, Czech Republic (CET Czech Republic Film Production or CIEE Prague Film Studies). Additionally, Film & Media students have recently studied at the following off-campus programs: DIS - Study Abroad in Copenhagen; NYU Spring at Tisch; DIS - Study Abroad in Stockholm.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement (WP) World Perspectives requirement.

A. STUDIO ART COURSES

112. Color and Design. (A)
Color might well be the most difficult element of the visual arts to get a handle on. Its unpredictability makes it challenging for beginners and experienced artists alike. This course involves a close study of color: mixing, matching, varieties of contrast, and color composition. This course is also intended to help sharpen compositional problem-solving skills, visual acumen, and inventive abilities. We will work in multiple variations and revisions of drawn, painted, and collaged studies. Elements such as line, force, weight, movement, interval, figure-ground, texture, and emphasis-subordination will be emphasized. Course projects are divided between closely structured works and independent notebook studies. *Staff*

114. Introductory Drawing. (A)
The fundamentals of drawing—still life, landscape, portrait and figure—using traditional and experimental techniques. The relationship of the method and techniques to artistic expression. *Laurie*

116. Introductory Sculpture. (A)
An introduction to how ideas and meaning can be transmitted through three-dimensional forms and materials and to the basic processes involved in the creation of the sculptures that convey those concepts. Materials include clay, wood, metal and mixed media; techniques include modeling, carving and fabrication (basic carpentry and welding). The work of sculptors, both historical and contemporary, will be examined and discussed. Students will be charged a fee for materials in this course. *Bishop*

142. Digital Photography I. (A)
Emphasizes making well thought-out artistic statements with the camera. Digital photography offers many of the same practices found in traditional photography, from camera settings with depth of field, ISO speeds and optimal exposure, to reading natural and artificial light. Concentration on potential for aesthetic enhancement, manipulation and storage in the digital darkroom as well as consideration of slides of master photographs and the different genres and approaches available to the artist photographer. Does not supply complete information on all aspects of digital photography or new commercial photographic media. Students will be charged a fee for materials in this course. Formerly ART 242. *Holmgren*

214. Figure and Narrative. (A)
This intermediate drawing class is dedicated to the examination of the figure as both a form and character. Exploring a wide range of materials, such as graphite, charcoal, ink and collage, the class will start with the study of structure and form with the use of skeletons and models. The second part of the semester will incorporate props, settings, observations of everyday life, and the use of reference photographs/images in order to explore the ideas of character and narrative. *Laurie*

218. Introduction to Architectural Design. (A)
Studio course to focus on elements of design and idea presentation. Design of new buildings, adaptive reuse of existing buildings, solar influences on design, site planning, interior design and historical reference will be considered as background for assigned projects. Presentation will include drawings and models. No prior knowledge of drafting is necessary. Students will be charged a fee for materials in this course. *Hickey*

220. Sustainable Design. (A)
This course is a combination of examining the principles of sustainable/green architectural design and executing design solutions for projects, incorporating the sustainable design principles. The course includes an introduction to architectural drawing/drafting and model making as well as basic principles of architectural design, in order to effectively execute the design solutions. *Same as ENE 220.* *Hickey*

222. Painting. (A)
An introduction to oil painting theory and practice with a strong emphasis on color, delineation of form and space, light and shadow, surface and texture, composition and personal expression. *Liu*

224. Chinese Brush and Ink Painting. (A) (NW) (WP)
An introduction to traditional Chinese painting and art of Chinese calligraphy with emphasis on a variety of traditional and modern Chinese painting techniques through different subject matters such as bird-and-flower painting and landscape painting. The course will also explore the practical aspects of the art of Chinese calligraphy and seal carving and their relationship to Chinese painting. *Liu*

226. Motion Picture Production. (A)
This course teaches filmmaking fundamentals through a series of projects that focus on motivated camera work, lighting for moving image, video editing, and the creative use of sound with video. Students will also explore a range of conceptual and methodological approaches in creative film practice. Prerequisite for subsequent filmmaking courses, such as Narrative and Collaboration. Formerly TDF 262. *Same as FLM 226.*
Moss

228. Scene Design. (A)
Emphasizes the design process and the visual idea and analyzes designs and designers. Students prepare models and renderings of assigned productions. *Same as FLM 228.* *Zura*

236. Introduction to Print Making. (A)
This course will survey a variety of printmaking methods, ranging from the historical to the contemporary. Solar plate, screen-printing and wood/linoleum block, as well as newer technologies such as xerography and laser and inkjet printing, will be explored. Artists, past and present, whom have worked in this genre will be studied; aesthetic concepts of composition and color will be considered; and the implications of producing multiple images will be addressed. Students will be required to complete a series of assigned projects as well as to create a final project. A Materials fee of $75 is required. *Holmgren*

254. Digital Art. (A)
Students in this course will work intensively with digital images: collecting, repurposing, combining, and analyzing images in order to explore and develop thematic content. Critique, revision, and working through variants will be emphasized. Students will read, look at a wide array of pictures, and explore case studies in art as a jumping-off point for thematic assignments, including photomontage and collage; wordless narratives; the body; surrealist dislocation; metaphor, metonym, and synecdoche; and the miniature and the gigantic. Participants will use Adobe PhotoShop as a tool for exploring composition, design principles, and the communication of ideas. This course will help sharpen compositional problem-solving skills, visual acumen, and inventive abilities. It is recommended for Art majors and minors, especially those inclining to painting, drawing, or photography. *Staff*

320. Narrative and Collaboration. (A)
An intensive workshop in visual storytelling. Students work in teams to develop, shoot and edit short narratives. This course requires an unusual amount of outside-of-class work. Prerequisite: FLM 226 or TDF/ART 262, "Fundamentals of Motion Picture Production." Formerly TDF 362. *Same as FLM 320.* *Moss*

322. Advanced Painting. (A)
An exploration of technical and expressive skills with complex painting and mixed-media techniques. This course will also develop critical thinking, aesthetic values and an awareness of contemporary issues in painting and their relationship to individual student work.
Prerequisite: ART 222. *Liu*

332. Documentary Film and Video. (A)
Documentary films aim to represent reality on screen. Dealing with actuality on camera poses a range of questions and challenges, from the aesthetic (e.g., how to show what can't be filmed), to the ethical (e.g., how to be fair to subjects), to the practical (e.g., how to engage audiences). This course will address these questions through weekly film screenings and discussions, theoretical and historical readings, and practical exercises. Students will complete the course through either a documentary project or a research paper. Formerly TDF 364. *Same as FLM 332.* *Moss*

336. Sculpture and the Environment. (A)
This course brings the study of sculpture into the wider context of environmental considerations—whether they be issues of location or ecology. Once sculpture moves off the pedestal and into a larger physical scale, questions regarding its relationship to the surrounding space (whether interior or exterior) are magnified and often become integrated into the structure of the artwork. Once sculpture expands into a larger conceptual framework, questions about the nature of materials, their manufacture, recyclability and relationship to the natural world also arise. Prerequisite: ART 116, ART 132 or permission of the instructor. Students will be charged a fee for materials in this course *Lee*

338. Experimental Media. (A)
This course introduces contemporary concepts and approaches towards making visual art in an experimental manner. Performance, conceptual art, time-based and digital media as well as a range of nontraditional material approaches will be explored. Not open to first-year students. *Lee*

342. The Constructed Image. (A)
Concentrates on ideas surrounding narrative tableaux, still life, cinema, and staged photography; introduces creative possibilities of space, props, place, and lighting. Addresses historical and contemporary concerns. The emphasis is on photography as a creative medium, within a fine arts context. Prerequisite: ART 142 or ART 242. *Holmgren*

462. Studio Capstone Course. (A)
Designed to guide advanced major and minor students concentrating in studio art through a critical examination of what they have accomplished in recent semesters and what their direction and goals are for the foreseeable future. Emphasis on production of substantial and challenging new work within a coherent direction and choice of media as well as research into the wider context of promoting and exhibiting work as a future professional. Taught as two half-credit courses, Fall and Spring. Prerequisite: permission of instructor. *Holmgren*

270–278, 370–378, 470–478. Studio Topics.
Special studio offerings, varying in subject. May be taken more than once for different subjects. Permission of instructor.

490. Independent Study in Studio Art. (A)
Independent study directed by the Studio Art staff. Prerequisite: Permission of the chairperson.

B. COURSES IN ART HISTORY

ART 103 is normally open only to first-years and sophomores.

103. Learning to See: Histories of Art & Architecture in the Western Tradition. (A)
How do we see the past? What do the objects produced in the past tell us about the transformation of visual experience over time? And how do we, in the modern age, tell the stories of those objects? This course introduces students to the questions art historians ask, the methods they use, and the works they study, focusing on the Western tradition from Antiquity to the present day. While the course spans more than 2000 years, it complements breadth with case studies focusing on conditions of making art, as well as the social, political and cultural contexts of cultural production. Students learn skills in looking, the analysis of visual form, and writing about what they see, skills that lay a foundation for future study in art, art history as well as many other disciplines. *Aleci, Clapper*

105. Introduction to Asian Art. (A) (NW) (WP)
An introduction to the visual culture of East Asia (China and Japan), including a unit on Indian Buddhist art. The course examines a small number of topics with an aim to introduce basic art historical method through the close study of key monuments. *Kent*

115. Greek Art and Archaeology. (A)
This course provides an overview of the archaeological monuments of ancient Greece. Coursework will focus on methodological approaches to analyzing building techniques, trends, styles and the social, political and religious functions of art and monumental architecture in ancient Greek society. Topics covered in lecture and classroom discussion will include archaeological and art historical interpretations of sacred and public architecture, urbanism, three-dimensional sculpture, relief sculpture, painting, decorative arts. There is a required field trip. *Same as CLS 115.* *Castor*

117. Roman Art and Archaeology. (A)
This course provides an overview of the archaeological monuments of ancient Rome. Coursework will focus on methodological approaches to analyzing building techniques, trends, styles and the social, political and religious functions of art and monumental architecture in ancient Roman society. Topics covered in lecture and classroom discussion will include archaeological and art historical interpretations of sacred and public architecture, urbanism, three-dimensional sculpture, relief sculpture, painting and decorative arts. There is a required field trip. *Same as CLS 117.* *Meyers*

121. Introduction to Architecture I. (A) (WP)
A survey of architecture from the first human settlement in the Neolithic period to the dramatic spaces of Gothic cathedrals. We study the monuments of the Western tradition (Egypt, the Ancient Near East, Greece, Rome, Byzantium, Islam, the Middle Ages) and the great civilizations of Asia, Africa and America. In addition to a chronological narrative, we focus on individual case studies through which we build the foundations in understanding architectural form. We learn about materials, structure, geometry, aesthetics, ritual, theology, ideology, ecology, crafts, labor, abstraction and poetics. Ultimately, we learn how piles of stones have articulated humanity's highest ideals, while we discover remnants of those ideals even in our own built environment. The story continues with Introduction to Architecture II, which focuses on the architecture of modernity between the Renaissance and the present. No prerequisites. *Kourelis*

123. Introduction to Architecture II. (A)
A survey of architecture from the fifteenth century to the present. The course aims to give a thorough understanding of architectural discourse from the Renaissance to current movements. Special focus will be given to the effects of industrialization, urbanization and the dialectics of modernity. In addition to learning the parade of styles and architectural innovations, we will consider the art of building as the highest form of human inquiry within the public realm. Moreover, we will learn how to read the language of architecture, its parts, inherent qualities, contradictions and formal principles. *Kourelis*

211. Islamic Art and Architecture. (A) (NW) (WP)
Islamic civilization is both global and regional. Spanning across three continents and fourteen centuries, it offers many interpretive challenges to western viewers, who have traditionally confined Islam to an outsider status. Growing out of the same cultural roots as medieval Europe, the art and architecture of Islam developed its own vocabulary, aesthetics and religious concerns. This chronological survey pays particular attention to the cross-cultural dimensions of Islam. We study the creative products of various caliphates but also contemplate the role that Islamic art and architecture has played in the construction of the West's self-identity. No previous familiarity with Islamic civilization is required. Material culture will guide us through a historical and theoretical discovery beginning with Muhammad's flight to Medina and ending with the Guggenheim's flight to Abu Dhabi. *Kourelis*

215. Motion Picture History. (A)
An introduction to the history of motion pictures from the 1890s through the present day. Surveys both the evolution of popular movies and influential artistic and rhetorical counter-currents, including "national" film movements, experimental cinema, and documentary. Formerly TDF 267. *Same as FLM 215.* *Staff*

219. Medieval Art and Architecture. (A)
Survey of the arts and architecture of the Middle Ages from the beginnings of Christianity in the first century to the origins of the Renaissance in the fifteenth-century CE. Emphasis is given in the transcendent possibilities of aesthetic experience and the material construction of immaterial ideals. The class also traces the vestiges of medieval art in the architectural and museological expressions of modern America. *Kourelis*

227. Lancaster Architecture. (A)
Lancaster is a virtual laboratory of architectural history representing every period of American architecture. The seminar focuses on Lancaster's most prominent buildings and investigates how architects translate abstractions (beauty, truth, morality) on the city's physical fabric. *Kourelis*

231. The Material Renaissance: Art and the Economies of Culture. (A)
History tells us the Renaissance in Italy was the Golden Age of art. This course proposes otherwise, that the Renaissance inaugurated an explosive new culture of consumption, fueled by urbanization, the unprecedented production of material goods, and the economic and social capital of cities. The result was a dramatically transformed society whose traces remain today. What was the Renaissance (and why should we care)? This course explores the cultural artifacts produced in this period—including city squares, buildings, paintings, furnishings, food and fashion—through the dynamic interplay of urban and rural economies, social and political institutions, and the intellectual movement of humanism. Focusing on the material production of this period, we ask what it tells us about the myths and realities of this new age. *Aleci*

233. Art of the Renaissance in Northern Europe. (A)
Painting, sculpture and the graphic arts in the Netherlands and Germany during the 15th and 16th centuries. Emphasis is placed on the emergence of startling new forms of naturalism during the period and their relationship to religious beliefs, commerce and changing systems of patronage. *Aleci*

235. Destroying Images. (A)
Defacement, destruction, removal, erasure: all are forms of iconoclasm, or "image-breaking." This course is designed to help you make sense of the diverse manifestations of physical assaults on inanimate objects, historically and in the present-day, as the arena in which colliding cultural, political, and social beliefs are exposed. Although we devote the last portion of the course on image-destruction after the election of Barack Obama and in the wake of Black Lives Matter, we begin with the historical and conceptual foundations for image destruction as a social practice found across time and cultures. Exploring the social, cultural, and political investment we place in material objects, we aim to answer the following question: why do we believe that ideas (and in some cases people) live in inanimate objects? *Same as GST/RST 235.* *Aleci*

241. 18th- and 19th-Century Art. (A)
A survey of European art from 1750 to 1900, including such movements as Neoclassicism, Romanticism and Impressionism and such artists as Constable, Delacroix and Van Gogh. We will consider art, architecture and decorative arts in their historical and cultural contexts, examining such themes as the significance of landscape in an industrializing world, the cultural competition of World's Fairs and the fashion for Orientalism. Prerequisite: No prerequisite, but ART 103 is strongly recommended. *Rauser*

243. American Art. (A)
Historical and aesthetic consideration of architecture, painting, decorative arts and sculpture produced in the United States from colonial settlement through the 1913 Armory Show. Course themes include the social functions of works of art, the relationship of U.S. and European cultures, the role of art in building a national identity, the development of an infrastructure of art institutions and the contrast and connection between popular and elite art. Prerequisite: prior coursework in art history or American studies is recommended. *Same as AMS 243.* *Clapper*

245. The History of Photography: The First 100 Years. (A)
An examination of the first 100 years of the medium from its invention to the documentary photography produced under the Farm Security Administration in the late 1930s. Emphasis will be placed on the relationship of photography to the arts of painting and literature, as well as on contextualizing photographs as documents of scientific investigation, ethnographic research, social history and personal expression. Prerequisite: Strongly recommended that students have had at least one art history course. *Same as TDF 245.* *Kent*

247. History of Fashionable Dress. (A)
A survey of the history of fashionable dress in Europe and America from the Renaissance to the present, examining men's and women's clothing in the context of artistic, historical, and cultural change in the modern period. This course will be divided into three units: Chronology; Object/Theory; and Interpretation. Students will select an interpretative context in which to situate their final project: cultural history, art history, or gender studies. Prerequisite: ART 103, ART 241, WGS 210, or permission of the instructor. *Same as WGS 247.* *Rauser*

249. History of Printmaking. (A)
Comprehensive historical consideration of the development and use of printmaking in the West from the 15th century to the present, emphasizing the social and aesthetic ramifications of the medium. The course introduces various processes, including woodcut, engraving, etching, aquatint, lithography and screen printing and considers such artists as Dürer, Rembrandt, Goya, Daumier and Warhol. Includes study of actual prints and studio demonstrations of techniques. Prerequisite: ART 103, 105, 114 or permission of the instructor. *Clapper*

251. Modern Art Since 1900. (A)
A chronological survey of painting, sculpture, and architecture in Europe and the United States from 1900 to the present with an emphasis on modernism. The course concentrates on major artistic movements, studying their visual features, conceptual basis, relation to artistic tradition, and cultural context. Prerequisite: ART 103 or permission of the instructor. *Clapper*

253. Art, Capitalism, and Markets. (A)
Why make, buy and sell art, and how? An examination of the production and consumption of art in capitalist economies. Considers what socially crucial functions art can serve, and how it gets paid for and distributed once markets rather than specific patrons become the main financial support. Historical and recent case studies from the early capitalism of Rembrandt's 17th-century Holland, to 19th-century American attempts to build democratic art institutions, to the popular art of Norman Rockwell and Thomas Kinkade and others, to present-day galleries and auction houses. Students who want to do so will have an opportunity to research and purchase a work of art, either on line, at auction, or from a dealer. *Same as BOS 253.* *Clapper*

265. Contemporary Graphic Novel. (H)
In this course, we will develop an historical, aesthetic and formal understanding of contemporary graphic fiction. We will study the genre's precedents in early comics, the interplay of the comics and their historical and cultural contexts, graphic fiction's engagement with high art, and the formal elements of graphic texts. Readings will include comic strips and comic books from 1900 to the present, Maus I and II, Watchmen, Fun Home, Jimmy Corrigan, It's a Bird, Black Hole, and other comics.
Same as ENG 265. *Sherin Wright*

281. Sages and Mountains:
History of Classical Chinese Painting. (A) (NW) (WP)
An introduction to the most important genres and themes in Chinese painting from roughly the mid-fourth to the end of the 14th century. Special attention will be given to the illustration of narrative and lyric poetry, the rise of monumental landscape painting, the ideal of reclusion, the painting theory of scholars, imperial patronage, Ch'an (Zen) Buddhist painting and the dynamic interaction between painting and calligraphy. *Kent*

283. Survey of Japanese Art. (A) (NW)
This course examines traditions and themes in the visual culture of Japan. Its primary objective is to investigate the development of that culture with an emphasis on the manner in which it evolved in response to Chinese and Korean cultural traditions. It provides a basic introduction to art historical approaches. We will reflect on such questions as: What cultural factors shape iconographic and stylistic traditions? In what ways do artifacts and art reflect religious and philosophical belief and ideas? *Kent*

311. Visual Thinking. (A)
Advanced seminar devoted to applying classical and contemporary film theory to particular problems and movies. Topic varies from term to term. Formerly TDF 363. *Same as FLM 311.* *Staff*

335. Destroying Images: Art and Reformation. (A)
This course examines the doctrinal and political conflicts between the Roman Catholic Church and the "reformed" religions of northern Europe in the 16th and 17th centuries, focusing on the impact on the visual culture of the period. The course examines "high" art and architecture, but pays particular attention to the attitudes towards images more broadly, the ideologies that drive them, and their operations across all sectors of society. *Same as GST 335 and RST 335.* *Aleci*

343. London & Paris, 1850–1890. (A)
A study of the artistic cultures of the two capitals of imperial power in the 19th century, London and Paris, including the architecture and urban design of the two cities as well as the decorative arts, fashion, and fine art of the period. Prerequisite: ART 103, ART 241, ART 243, or permission of the instructor. *Same as WGS 343.* *Rauser*

353. American Photography. (A)
Soon after the invention of photography, photographic images quickly constituted much of visual culture—either national or global. Sometimes photographs were made with high artistic intention, but, far more often, not. This seminar will examine diverse topics in 19th and 20th-century American photographic history, from vernacular images produced for the masses (daguerreotypes, tintypes, snapshots) to what have now become nearly iconic photographs produced either for documentary purposes or to make artistic, self-expressive statements. We will consider the work of unknown makers as well as that produced by celebrated photographers such as Alfred Stieglitz, Edward Weston, Walker Evans, Ansel Adams, Dorothea Lange, Robert Frank, and Robert Adams. *Same as ART 353.* *Kent*

383. Landscape in Chinese Poetry, Painting and Gardens. (A) (NW) (WP)
An examination of the most enduring theme in both the literary and visual arts of China from the Han dynasty to the modern period. An introductory unit explores the philosophical foundations for later cultural development. The course then investigates the theme of landscape as it is expressed in literature (especially poetry) and painting, as well as how these two arts informed the making of gardens. Prerequisite: ART 105, ART 281 or permission of the instructor. *Kent*

461. Methods in Art: Art, History and the Museum. (A)
Tensions between the diverse ways we study art—as an historical discipline, and in the context of the museum—is the subject of this seminar. Although they are integrally related, each constructs our understanding of the object, and history, differently. Working with and through the collections of the Phillips Museum of Art, students will engage the methods of the historian and the museum professional, and their complex relationships to the material object itself. Offered every Fall. *Aleci*

271–279, 371–379, 471–479. Art History Topics.
Special art history offerings, varying in subject. May be taken more than once for different subjects. Permission of instructor required.

490. Independent Study in Art History. (A)
Independent study directed by the Art History staff. Prerequisite: Permission of the chairperson.

ART HISTORY TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Accumulations.

C. COURSES IN FILM AND MEDIA

110. Introduction to Film and Media. (A)
An introduction to the way movies are put together, to basic critical terms and concepts used in the study of movies, videos and television and to the complex roles that cinema and television play in society—as art, business, entertainment and a medium of information and ideology. Formerly TDF 165. *Eitzen*

213. Black American Film. (A)
An introduction to film studies using black film as a genre of Hollywood and independent film. Covers the work of Oscar Michaux through the "blaxploitation" films of the 1970s and beyond. Explores films as social commentary in their particular historical contexts. Particular attention is given to screen analysis of segregation, sexuality, class differences and more. Formerly TDF 213. *Same as AFS/AMS/WGS 213.* *Willard*

215. Motion Picture History. (A)
An introduction to the history of motion pictures from the 1890s through the present day. Surveys both the evolution of popular movies and influential artistic and rhetorical counter-currents, including "national" film movements, experimental cinema, and documentary. Formerly TDF 267. *Same as ART 215.* *Staff*

226. Motion Picture Production. (A)
This course teaches filmmaking fundamentals through a series of projects that focus on motivated camera work, lighting for moving image, video editing, and the creative use of sound with video. Students will also explore a range of conceptual and methodological approaches in creative film practice. Prerequisite for subsequent filmmaking courses, such as Narrative and Collaboration. Formerly TDF 262. *Same as ART 226.* *Eitzen*

245. The History of Photography: The First 100 Years. (A)
An examination of the first 100 years of the medium from its invention to the documentary photography produced under the Farm Security Administration in the late 1930s. Emphasis will be placed on the relationship of photography to the arts of painting and literature, as well as on contextualizing photographs as documents of scientific investigation, ethnographic research, social history and personal expression. Prerequisite: Strongly recommended that students have had at least one art history course. Formerly TDF 245. *Same as ART 245*. *Kent*

261. Writing for the Screen. (A)
Combining workshop, lecture, class discussion, and screenings, this course explores the fundamentals of the art and craft of writing for the screen. Over the course of the semester we will investigate the nature and content of three types of film scripting (documentary, experimental, and narrative), working out particular and common traits, strategies, and approaches to script making both in theory and practice.. Formerly TDF 261. *Staff*

303. As Seen on TV: History as Media Event. (H)
"Where were you when…?" Whether the Kennedy assassination, Richard Nixon's resignation, the shooting of Ronald Reagan or the fall of the Berlin wall, most Baby Boomer Americans would answer: "I was watching it on TV." This course will explore the representation of history-making moments in the mass media, with a focus on the second half of the 20th century. We will explore how television covered the event at the time, how that coverage shaped the first draft of history, and how it has participated in shaping the cultural memory of the event in the years since. Course units include Edward R. Murrow's duel with Senator Joe McCarthy, the JFK assassination, Vietnam, Watergate, the O.J. Simpson case, and 9/11. Formerly TDF 303. *Same as AMS 303*. *Frick*

311. Visual Thinking. (A)
Advanced seminar devoted to applying classical and contemporary film theory to particular problems and movies. Topic varies from term to term. Formerly TDF 363. *Staff*

318. Media and Politics. (S)
Examines the role of the mass media (including print, broadcast, and new media) in American politics, giving particular attention to the ways in which the media both influence and are influenced by political actors and the political process. Prerequisite: GOV 100. Formerly TDF 318. S*ame as GOV 318*. *Medvic*

320. Narrative and Collaboration. (A)
An intensive workshop in visual storytelling. Students work in teams to develop, shoot and edit short narratives. This course requires an unusual amount of outside-of-class work. Prerequisite: FLM 226 or TDF/ART 262, "Fundamentals of Motion Picture Production." Formerly TDF 362. *Eitzen*

324. Alternative Forms and Practices. (A)
A rotating topics course that explores alternative moving image media, technologies, and exhibition models. Students in this workshop will be exposed to a range of skills and techniques that filmmakers and artists continue to practice beyond the mainstream. The course may cover one or more of the following practices: filming with 16mm cameras, hand-processing film, editing film by hand, direct animation, digital video art, and/or found footage filmmaking. *Moss*

330. Experimental Film and Video. (A)
An intensive workshop in experimental filmmaking politics and poetics, this course focuses on avant-garde movements from the early 20th century to present-day. Experimental film generally strays from conventional forms and narratives, alternatively emphasizing painterly, expressive, political, and lyrical tendencies in moving images. Student projects will engage specific aesthetics and approaches studied in class through the creation of a series of original works. Prerequisite: FLM/ART 226 or TDF/ART 262 or permission of the instructor. Formerly TDF 367. *Staff*

332. Documentary Film and Video. (A)
Documentary films aim to represent reality on screen. Dealing with actuality on camera poses a range of questions and challenges, from the aesthetic (e.g., how to show what can't be filmed), to the ethical (e.g., how to be fair to subjects), to the practical (e.g., how to engage audiences). This course will address these questions through weekly film screenings and discussions, theoretical and historical readings, and practical exercises. Students will complete the course through either a documentary project or a research paper. Formerly TDF 364. *Same as ART 332*. *Staff*

341. Special Topic in Film and Media. (A)
A film and media seminar that applies methods of historical, theoretical, and/or cultural analysis to a specific genre, period, movement, group, or place. The topic and focus of the seminar will change for each new iteration and may be repeated for credit. Formerly TDF 343. *Staff*

354. Gender and Race in Ethnic Studies Film.
"Gender and Race in Ethnic Studies Film" examines the concept of Ethnic Studies as an educational curriculum emerging from social movements. In an effort to understand Ethnic Studies, we will explore the media productions by and about people of color in relation to U.S. social unrests of the late-1960s, 1970s, and the aftermath of these decades. We will focus on three groups: U.S. Latinos, African Americans, and Asian Americans. *Same as AFS/AMS/WGS 354*. *Villegas*

356. Italian Film History. (A)
Introduction to Italian film history, with an emphasis on the relationship between cinema and society and culture. May include influential auteurs (Visconti, De Sica, Antonioni, Pasolini, Fellini) and movements (Neorealism, cinema politico), as well as popular forms (commedia all'italiana), genre films, experimental filmmaking, and documentary. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. Formerly TDF 356. *Same as ITA 356*. *G. Lerner*

366. Italian Cinema and the Arts. (H)
Cinema has presented itself, since its very origins, as a synthetic form of art that could incorporate painting, architecture, sculpture, as well as music, literature, and dance. This course aims to explore the different ways in which inter-artistic dialogue has influenced the development of Italian cinema, determining the style of its major auteurs and contributing to the complexity of their films. A series of critical and theoretical readings will help us develop a solid interpretive approach to the films, which will include works by Fellini, Antonioni, Pasolini, Visconti, Rossellini, and other filmmakers. Normally taught in Italian. Prerequisite: ITA 310 or permission of the instructor. Formerly TDF 366. *Same as ITA 366*. *G. Lerner*

387. Writing for Television. (A)
Combining workshop, lecture, class discussion, and in-class writing exercises, this course explores the fundamentals of the art and craft of writing for television. Over the length of the semester we will investigate the nature and meaning of "drama" and "visual narrative" as functioning on the small screen. We will do this in part through the examination of format, style, structure, and needs of the network/streaming sites for both a comedy (30 minute) and a drama (60 minute) series. We will also study the basics of scene building, conflict, character, and dialogue by writing a draft of both a "spec" script and an original pilot. Students will develop and complete an outline and first draft of a television pilot on their own and in collaborative groups. *Same as TND/ENG 387*. *Silberman*

440. Advanced Topic in Film and Media. (A)
An advanced film and media seminar or workshop that applies theoretical and/or practical methodologies to a specific mode, technology, or sequence of ideas. The course may function as a seminar in film/media theory or as a practical filmmaking workshop. It primarily serves as a capstone for Film & Media majors, yet it is open to students with sufficient training and experience. The topic and focus of the seminar will change for each new iteration and may be repeated for credit. *Moss*

490. Independent Study.
Independent study directed by the Film and Media staff. Permission of chairperson. *Staff*

FILM AND MEDIA TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Film Comedy.
Race & Gender in Med. Migrant Film.
Writing for Television.
Multi-Media Memoir: Race, Class, Sex in Movies.

ASTRONOMY
(See Physics and Astronomy)

BIOCHEMISTRY
(See Biology and Chemistry)

BIOINFORMATICS
(See Biology and Computer Science)

BIOLOGICAL FOUNDATIONS OF BEHAVIOR

Professor Timothy C. Roth II, Chair

MEMBERS OF THE BIOLOGICAL FOUNDATIONS OF BEHAVIOR COMMITTEE

Daniel R. Ardia	*Professor of Biology*
Meredith J. Bashaw	*Professor of Psychology*
Robert N. Jinks	*Professor of Biology*
Clara S. Moore	*Professor of Biology*
Joseph T. Thompson	*Professor of Biology*
Lauren S. Howard (on leave 2022-23)	*Associate Professor of Psychology*
Ryan T. Lacy	*Associate Professor of Psychology*
Timothy C. Roth II	*Associate Professor of Psychology*
Christina M. Weaver	*Associate Professor of Mathematics*
Aaron F. Howard	*Visiting Assistant Professor of Biology*

Additional faculty not on the program committee also contribute to this program.

Behavior is manifest in the function of neurons, the cells that comprise the nervous system. The networks of a few to many million neurons that underlie the simple and complex behaviors exhibited by humans and animals are shaped by biological, environmental, ecological, evolutionary, social and psychological influences. To develop an understanding of the complex interactions among these factors that generate normal and abnormal behavioral states, critical thinking, reading and writing skills across disciplinary boundaries are required. The Biological Foundations of Behavior Program is offered jointly by the departments of Biology and Psychology. It presents students the opportunity to complete an interdisciplinary major with a focus on either animal behavior or neuroscience.

Neuroscience is an integrative discipline that utilizes knowledge and tools from biology, chemistry, physics, mathematics and psychology to study the nervous system across several levels of analysis from molecules to the behavior of individual organisms. Despite the amazing advances that have been made in neuroscience to date, the human brain is a frontier that we've only begun to chart. Understanding how it works, how to protect it from disease and how to fix it when it becomes damaged or diseased is one of humankind's greatest challenges.

Animal Behavior—Behavior is a fundamental property of all living things. Indeed, whether animals survive and reproduce often depends on how they behave. Studying individual variation in behavior can reveal the role of natural selection in shaping behavior. Comparative research with many species provides animal models for studying development, sensation, perception, life history evolution, reproductive behavior, learning and cognition as well as providing a broader context for better understanding the influences affecting human behavior and the mind. In addition, studying how individuals behave in response to varying environmental conditions can help predict effects of climate change and the fate of populations. Conservation efforts and resource management depend upon ecological and evolutionary studies of the relationship between animal behavior and the environment.

The Neuroscience and the Animal Behavior majors begin with core courses in biology, chemistry, physics and/or mathematics, that create a solid foundation upon which to begin the research-intensive coursework that follows. Following cornerstone courses at the introductory level in neuroscience and biopsychology, Neuroscience students choose elective courses in neuroscience and related areas. After foundational, research-intensive training in animal behavior, Animal Behavior students select from a series of core and elective courses in animal behavior. The Neuroscience and the Animal Behavior majors each culminate with capstone research experiences, typically through independent study, that may be defended for honors in the major during the senior year.

A major in Neuroscience for the Class of 2023 requires the completion of 15 courses:

Biology Core (two courses)
BIO 110. Principles of Evolution, Ecology and Heredity;
BIO 220. Principles of Physiology and Development.

Physical Sciences and Mathematics Core (six courses)
CHM 111, 112, 211, 212; PHY 111; MAT 109.

Fundamentals of Neuroscience (two courses)
BIO 240. Neuroscience; PSY 351 (formerly 302 Biopsychology with Lab.

Research Methods and Statistics (one course)
PSY 300 (formerly 230).Design and Statistics.
or
BIO 210. Biostatistics.

Area Studies Electives (Three courses distributed across at least two areas are required; one must include a lab.)

Area 1: Neural and Physiological Mechanisms
BIO 328. Physical Biology.
BIO 330. Advanced Neurobiology. (BWR)
BIO 341. Neurochemistry. (BWR)
BIO 343. Functional Human Neuroanatomy. (BWR)
PSY 357. Hormones and Behavior with Lab.
PSY 480. Collaborative Research: Animal Behavior and Models.

Topics courses in neuroscience, physiology or perception may serve as Area 1 courses upon approval of the BFB Chair.

Area 2: Behavioral and Cognitive Processes
PSY 301 (formerly 305). Cognitive Psychology.
PSY 320 (formerly 250). Animal Behavior.
PSY 305. Cognitive Psychology.
PSY 306. Evolution of Mind and Intelligence.
PSY 310. Conditioning and Learning.
BIO 337. Behavioral Ecology.
BIO 371. Evolutionary Disease Biology.
PSY 371. Evolutionary Psychology.
PSY 450. Cognitive Development.
PSY 480. Collaborative Research in Comparative Cognition and Behavior.
PSY 481. Collaborative Research in Developmental Psychology.
PSY 482. Collaborative Research: Human Behavior/ Social or Evolutionary.
PSY 483. Collaborative Research: Human Cognition in Context
PSY 486. Collaborative Research: Human Physical and Mental Health.

Topics courses in behavior or psychology may serve as Area 2 courses upon approval of the BFB Chair.

Area 3: Cellular and Molecular Approaches
BIO 230. Cell Biology.
BIO 305. Genetics.
BIO 306. Developmental Biology. (BWR)
BIO 334. Metabolic Biochemistry.
BIO 335. Advanced Molecular Biology Seminar.
BIO 341. Neurochemistry. (BWR)
Topics courses in cell and molecular biology or biochemistry may serve as Area 3 courses upon approval of the BFB Chair.

Advanced Research (Required of all students. Take one of the following.)
BFB 390. Directed Research in Animal Behavior or Neuroscience.
BFB 490. Independent Research in Neuroscience or Animal Behavior,
or approved Biology "BWR" laboratory course,
or approved Psychology "Empirical Research" course (including PSY 460).
An area studies course may not be double-counted as an advanced research course and vice versa.

A major in Neuroscience for the classes of 2024 and later requires the completion of 15 courses:

Biology Core (three courses)
BIO 101. Evolution, Ecology and Biodiversity.
BIO 102. Cell Biology and Genetics.
BIO 200. Integrative Biology.

Physical Sciences and Mathematics Core (five courses)
CHM 111, 112, 211; PHY 101 or 111; MAT 109.

Fundamentals of Neuroscience (two courses)
BIO 240. Neuroscience.
PSY 351. Biopsychology with Lab OR PSY 27x. Biopsychology.

Research Methods and Statistics (one course)
PSY 300. Research Design and Statistics.
or
BIO 210. Biostatistics.

Area Studies Electives (Three courses distributed across at least two areas are required; one must include a lab.)

Area 1: Neural and Physiological Mechanisms
PSY 313. Cognitive Neuroscience.
BIO 328. Physical Biology.
BIO 330. Advanced Neurobiology. (BWR)
BIO 341. Neurochemistry. (BWR)
BIO 343. Functional Human Neuroanatomy. (BWR)
PSY 357. Hormones and Behavior with Lab.
PSY 480. Collaborative Research: Animal Behavior and Models.
Topics courses in neuroscience, physiology or perception may serve as Area 1 courses upon approval of the BFB Chair.

Area 2: Behavioral and Cognitive Processes
PSY 202. Developmental Psychology.
PSY 203. Embodied Cognition.
PSY 305. Cognitive Psychology.
PSY 310. Conditioning and Learning.
PSY 320. Animal Behavior with Lab.
BIO 337. Behavioral Ecology.
PSY 355. Face Perception with Lab.
BIO 371. Evolutionary Disease Biology.
PSY 371. Evolutionary Psychology.
PSY 450. Cognitive Development.
PSY 464. Evolution of Mind and Intelligence.
PSY 482. Collaborative Research: Human Behavior/ Social or Evolutionary.
PSY 483. Collaborative Research: Human Cognition in Context.
PSY 486. Collaborative Research: Human Physical and Mental Health.
Topics courses in behavior or psychology may serve as Area 2 courses upon approval of the BFB Chair.

Area 3: Cellular and Molecular Approaches
BIO 306. Developmental Biology.
BIO 334. Metabolic Biochemistry.
BIO 335. Advanced Molecular Biology Seminar.
BIO 341. Neurochemistry.
Topics courses in cell and molecular biology or biochemistry may serve as Area 3 courses upon approval of the BFB Chair.

Advanced Research (Required of all students. Take one of the following.)
BFB 390. Directed Research in Animal Behavior or Neuroscience.
BFB 490. Independent Research in Neuroscience or Animal Behavior.
Psychology Collaborative (PSY 460, 48x)
Approved 300-level Biology Laboratory Course 390/490 in an approved department/program.
An area studies course may not be double-counted as

an advanced research course and vice versa.

Organism-Based Lab Requirement
Neuroscience majors must enroll in at least one 300-level lab course focused at the organism level (e.g. BIO 326, 328, PSY 320, 352, 357; note that PSY 351. Biopsychology with Lab fulfills this requirement).

A major in Animal Behavior for the Class of 2023 requires the completion of 15 courses:

Biology Core (two courses)
BIO 110. Principles of Evolution, Ecology and Heredity.
BIO 220. Principles of Physiology and Development.

Physical Sciences and Mathematics Core (three courses from among the following)
CHM 111, 112, 211, 212.
PHY 111, 112.
MAT 109, 110, 116, 216, 323.
CPS 111, 112, 222.
ENE 110, 114, 250.
ECO 410.
PSY 460.

Research Methods and Statistics (one course)
PSY 300 (formerly 230). Design and Statistics or
BIO 210. Biostatistics.

Fundamentals of Behavior (three courses)
PSY 320 (formerly 250). Animal Behavior. (required)
One of:
BIO 337. Behavioral Ecology.
PSY 464 (formerly 306). Evolution of Mind and Intelligence.
One of: BIO 240. Neuroscience.
PSY 351 (formerly 302). Biopsychology with Lab.
PSY 357 (formerly 303). Hormones and Behavior with Lab.
PSY 37x. Psychopharmacology with Lab.

Area Studies Electives (Required of all students. Five courses with no more than two courses chosen from any one area. Students with permission of the BFB Program Chair may substitute no more than one area elective course with one semester of BFB 390 or 490.)

Area 1: Mechanisms of Behavior. Courses that emphasize the neural, endocrine and physiological basis of behavior and cognition.
BIO 240. Neuroscience.
PSY 301. Sensation and Perception.
BIO 330. Advanced Neurobiology. (BWR)
BIO 334. Biochemistry.
BIO 341. Neurochemistry. (BWR)
PSY 351 (formerly 302). Biopsychology with Lab.
PSY 357 (formerly 303). Hormones and Behavior with Lab.
PSY 480. Collaborative Research: Animal Behavior and Models.
PSY 487. Collaborative Research in Biological Psychology.
Topics courses in neuroscience or biochemistry may serve as Area 1 courses upon approval of the BFB Chair.

Area 2: Organismal and Comparative Approaches. Courses with an emphasis on functional organization and integration within individual organisms.
PSY 203 (formerly 312): Embodied Cognition.
PSY 310. Conditioning and Learning.
PSY 311. Origins of Moral Thought
BIO 326. Comparative Physiology.
BIO 327. Vertebrate Anatomy.
BIO 328. Physical Biology.
BIO 337. Behavioral Ecology.
BIO 343. Functional Human Neuroanatomy.
PSY 350. Primate Behavior.
BIO 371. Evolutionary Disease Biology.
PSY 371. Evolutionary Psychology.
PSY 450. Cognitive Development.
PSY 453. Nature/Nurture.
PSY 464 (formerly 306). Evolution of Mind and Intelligence.
PSY 480. Collaborative Research: Animal Behavior and Models.
PSY 485. Collaborative Research in Human Perception and Action.
Topics courses in biology or psychology may serve as Area 2 courses upon approval of the BFB Chair.

Area 3: Ecological and Population Perspectives. Courses with an emphasis on ecological factors primarily at the population level.
BIO 323. Ecological Concepts and Applications. (BWR)
BIO 325. Marine Biology.
BIO 336. Evolution.
BIO 360. Wildlife Conservation.
Topics courses in ecology, environmental studies or ecological psychology may serve as Area 3 courses upon approval of the BFB Chair.

Area 4: Cognate Studies. These courses complement courses from Areas 1 – 3 and often serve as a pre- or corequisite for other advanced courses.
PSY 200 (formally 220). Neuroethics
PSY 202 (formerly 304). Developmental Psychology.
PSY 203 (formerly 312). Embodied Cognition.
PSY 206 (formerly 307). Personality Psychology.
PSY 208 (formerly 308). Psychopathology.
ENE 216. Environmental Policy.
BIO 230. Cell Biology.
ENE 250. Environmental Resources & Geographic Information Systems.
BIO 305. Genetics.
PSY 305. Cognitive Psychology.
BIO 306. Developmental Biology.
PSY 309. Social Psychology.
PSY 311: Origins of Moral Thought.
ENE 320. International Environmental Law.
BIO 322. Microbiology.
BIO 332. Molecular Biology.
ANT 337. Anthropology of Environment.
ENE 344. Global Change/Natural Resources.
PSY 355. Face Perception with Lab.

ENE 405. Marine Protected Areas.

In Area 4, students may, with permission of the BFB Chair, elect to take a course above the introductory level in a cognate area (e.g., Anthropology, Environmental Studies, Philosophy or Computer Science).

Advanced Research (Required of all students. Take one of the following.)

BFB 390. Directed Research in Animal Behavior or Neuroscience.

BFB 490. Independent Research in BFB.

or, approved Biology course with investigative/collaborative research required (BIO 323–342).

or, approved Psychology "Empirical Research" course (including PSY 460).

An area studies course may not be double-counted as an advanced research course and vice versa.

A major in Animal Behavior for the Classes of 2024 and later requires the completion of 15 courses:

Biology Core (three courses)

BIO 101. Evolution, Ecology and Biodiversity.
BIO 102. Cell Biology and Genetics.
BIO 200. Integrative Biology.

Physical Sciences and Mathematics Core (three courses from among the following)

CHM 111, 112, 211, 212.
PHY 101, 102, 111, 112.
MAT 109, 110, 116, 216, 323.
CPS 111, 112, 222.
ENE 110, 114, 250.
ECO 410.
PSY 460.

Research Methods and Statistics (one course)

PSY 300 (formerly 230). Research Design and Statistics.
or BIO 210. Biostatistics.

Fundamentals of Behavior (three courses)

PSY 320. Animal Behavior. (required)

One of: BIO 337. Behavioral Ecology.
PSY 464. Evolution of Mind and Intelligence.

One of: BIO 240. Neuroscience.
PSY 351. Biopsychology with Lab.
PSY 357. Hormones and Behavior with Lab.
PSY 37x. Psychopharmacology with Lab.

Area Studies Electives (Required of all students. Four courses with no more than two courses chosen from any one area.)

Area 1: Mechanisms of Behavior. Courses that emphasize the neural, endocrine and physiological basis of behavior and cognition.

BIO 240. Neuroscience.
BIO 330. Advanced Neurobiology.
BIO 334. Biochemistry.
BIO 341. Neurochemistry.
PSY 351. Biopsychology with Lab.
PSY 357. Hormones and Behavior with Lab.
PSY 480. Collaborative Research: Animal Behavior and Models.

Topics courses in neuroscience or biochemistry may serve as Area 1 courses upon approval of the BFB Chair.

Area 2: Organismal and Comparative Approaches. Courses with an emphasis on functional organization and integration within individual organisms.

PSY 203. Embodied Cognition.
PSY 310. Conditioning and Learning.
PSY 311. Origins of Moral Thought.
BIO 326. Comparative Physiology.
BIO 328. Physical Biology.
BIO 337. Behavioral Ecology.
BIO 343. Functional Human Neuroanatomy.
PSY 350. Primate Behavior.
BIO 371. Evolutionary Disease Biology.
PSY 371. Evolutionary Psychology.
PSY 450. Cognitive Development.
PSY 453. Nature/Nurture.
PSY 464. Evolution of Mind and Intelligence.
PSY 480. Collaborative Research: Animal Behavior and Models.

Topics courses in biology or psychology may serve as Area 2 courses upon approval of the BFB Chair.

Area 3: Ecological and Population Perspectives. Courses with an emphasis on ecological factors primarily at the population level.

BIO 323. Ecological Concepts and Applications.
BIO 325. Marine Biology.
BIO 336. Evolution.
BIO 360. Wildlife Conservation.

Topics courses in ecology, environmental studies or ecological psychology may serve as Area 3 courses upon approval of the BFB Chair.

Area 4: Cognate Studies. These courses complement courses from Areas 1 – 3 and often serve as a pre- or corequisite for other advanced courses.

PSY 200. Neuroethics
PSY 202. Developmental Psychology.
PSY 203. Embodied Cognition.
PSY 206. Personality Psychology.
PSY 208. Psychopathology.
ENE 216. Environmental Policy.
ENE 250. Environmental Resources & Geographic Information Systems.
PSY 305. Cognitive Psychology.
BIO 306. Developmental Biology.
PSY 309. Social Psychology.
PSY 311. Origins of Moral Thought.
ENE 320. International Environmental Law.
BIO 322. Microbiology.
BIO 332. Molecular Biology.
ANT 337. Anthropology of Environment.
ENE 344. Global Change/Natural Resources.
PSY 355. Face Perception with Lab.
ENE 405. Marine Protected Areas.

In Area 4, students may, with permission of the BFB Chair, elect to take a course above the introductory level in a cognate area (e.g., Anthropology, Environmental

Studies, Philosophy or Computer Science).

Advanced Research (Required of all students. Take one of the following.)

BFB 390. Directed Research in Animal Behavior or Neuroscience.
BFB 490. Independent Research in Neuroscience or Animal Behavior,
Psychology Collaborative (PSY 460, 48x)
Approved 300-level Biology Laboratory Course
390/490 in an approved department/program.

An area studies course may not be double-counted as an advanced research course and vice versa.

To be considered for honors in BFB, graduating seniors, in addition to meeting the College's general requirements for honors, must possess a cumulative GPA in the major of 3.33 or greater and complete no less than two semesters of independent research in neuroscience or animal behavior. Normally, prospective honors students will enroll in two semesters of BFB 490.

The writing requirement in the Biological Foundations of Behavior major is met by completion of the normal courses required to complete the major.

The indication as to when a course will be offered is based on the best projection of the BFB Program Committee and the departments of Biology and Psychology and is subject to change.

Majors in the Biological Foundations of Behavior Program have studied abroad in the following programs in recent years: School for Field Studies (Australia, Costa Rica, Kenya, Tanzania); Danish International Study (DIS), Copenhagen; Institute for Study Abroad at Butler University programs (New Zealand, United Kingdom); IES's Galápagos Islands Direct Enrollment program; Budapest Semester in Cognitive Science; University of Queensland & Macquarie University, Australia. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirements; (WP) World Perspectives requirement.

BIO 240. Neuroscience. (N)
Principles of nervous system function from the molecular through the organ system level as illustrated by the vertebrates and invertebrates. Approximately one half of the course will cover basic cellular principles of nervous system organization, development and physiology. The remaining lectures will consider the role of functionally identified neural networks in behavior control. Prerequisite: BIO 220 or BFB/PSY 302. Offered every Spring. *Same as PSY/SPM 240.* *Jinks*

PSY 202. Developmental Psychology.
An examination of the relative contributions of nature and nurture on children's behavioral, cognitive, and perceptual development from the prenatal period through adolescence. Topics include the development of language, concepts, intelligence, socialization, motor abilities, and emotional understanding, with discussion informed by current and classic primary reading. Research activities and analyses integrated into course work. Prerequisite: PSY100, SPM 100, or a prior philosophy course. Previously PSY 304. *Howard*

PSY 203. Embodied Cognition. (NSP)
Embodied Cognition studies mind as the dynamic, adaptive, meaning-creating activity of bodies in environments. Surveying the foundations of this framework (e.g. ecological psychology, robotics, phenomenology, cognitive linguistics, and social interaction), we will explore the entangled evolutionary histories of agents, environments, and their transactions (including language). Through activities and discussions we will investigate how bodies being bodies together give rise to value, reasoning, action, and experience. Prerequisite: PSY100, SPM100, or a prior philosophy course. Previously PSY 312. *Cuffari*

PSY 305. Cognitive Psychology.
In this course we will ask how some familiar human behaviors seeing, classifying, remembering, speaking, reasoning are possible. We will learn how cognitive scientists go about answering these questions, and what some of the classic answers are. The idea is both to introduce some key findings in cognitive psychology, and to develop the skills to understand and critically evaluate cognitive psychology research. In addition to lectures, the course will include hands-on experiments and demonstrations; student presentations of individual journal articles; and debates about the broader implications of some cognitive psychology research. Prerequisite: PSY 100 and either PSY 300/230 or BIO 210. *Iricinschi*

PSY 310. Conditioning and Learning.
An introduction to the process by which human and animal behavior changes as a function of experience. Examines basic mechanisms for learning (including habituation, sensitization and classical and operant conditioning) and explores the scientific and practical application of these mechanisms to explain and predict behavior. Discusses the extent to which learning mechanisms are consistent across species and how the physiology, natural environment and social systems of individual species interact with basic learning processes to produce different behavioral outcomes. Prerequisite: PSY 100 or BIO 110 or SPM 100. Offered every Fall. *Lacy*

PSY 311. Origins of Moral Thought.
Moral values define us, unite us, and give meaning to our lives. How have we come to hold our particular moral convictions? We will examine this question on three different timescales: millennia (human evolution), centuries (cultural dynamics), and years (child development). Students will evaluate and synthesize insights from psychology, philosophy, biology, anthropology, economics, and history in order to understand the manifold origins of moral beliefs and behaviors, thus challenging existing values and cultivating improved abilities to create a better future. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. *Rottman*

PSY 320. Animal Behavior with Lab. (N)
An integrative approach to animal behavior from the perspectives of ethology, behavioral ecology, and comparative psychology. The structure, function, development, and evolution of behavioral adaptations including orientation, foraging and predation, communication, social organization, and reproductive strategies. Observational and experimental research required. Outside class time to work on independent research project. Prerequisites: BIO 101/110 and permission of instructor. Corequisite: either BIO 210 or PSY 300/230, or permission of the instructor. Same as BFB/BIO 320. Previously PSY 250. *Baran*

BIO 323. Ecological Concepts and Applications. (N)
The study of interactions between organisms and their environment. Includes physiological, behavioral, population, community, and ecosystem ecology. Class exercises and discussions involve critical evaluation of current research and applications of ecological concepts to conservation and management. In the laboratory portion of the course, students will design and execute an experiment at a local field site and write a research proposal. Prerequisites: BIO 101/110 & BIO 200/220. Counts as Natural Environment core course for Environmental Studies.

BIO 325. Marine Biology. (N)
Application of ecological principles to marine environments. Structural and functional adaptations of marine organisms; interactions among organisms; and emphasis on the interactions of individuals, populations,

and communities with physical, chemical, and geological processes in the ocean. Includes analysis of primary scientific literature, field and laboratory studies, and individual research projects. Prerequisite: BIO 200/220. *Fields*

BIO 326. Comparative Physiology. (N)
Physiological adaptation of animals to the environment, focusing on respiratory, circulatory, digestive, and musculoskeletal systems, and on the effects of variation in oxygen, temperature, and the availability of food and water. Prerequisite: BIO 101 or 110 and BIO 200 or 201. *Thompson*

BIO 328. Physical Biology. (N)
Participants in the course will use the basic principles of fluid and solid mechanics, optics, vibration, and electromagnetic fields to analyze the morphology and function of organisms or parts of organisms. Topics will include vision, transparency, navigating and communicating with sound, circulatory systems, swimming and flying, and the mechanical properties of biomaterials, structures, and movement. Prerequisites: BIO 220 and permission of instructor. Corequisite: PHY111. *Thompson*

BIO 330. Advanced Neurobiology. (N)
Advanced issues in neuroscience will be explored from a comparative perspective in this lecture/seminar hybrid. The major sensory modalities will be studied—from stimulus transduction to perception—as models of neural processing. Current research in cellular, systems-level, integrative/behavioral and cognitive neuroscience will be emphasized. Laboratory includes an independent research project in sensory neurobiology defined, proposed, pursued and disseminated by small research teams. Prerequisite: BIO/BFB 240 or BIO 230 and permission of the instructor. *Jinks*

BIO 336. Evolution. (N)
As a unifying principle of biology, evolution integrates genetics, molecular biology, physiology, development, behavior, and ecology. This course will cover the processes responsible for changes in living organisms over time with a focus on evidence for shared evolutionary history. Topics will include: the generation of new forms and new lineages; extinction; natural selection and adaptation; an assessment of genetics, genomics, and the molecular basis of evolution; evolutionary developmental biology; sexual selection; life history and behavioral evolution; and the history of evolutionary thought. We will also address applications of evolutionary biology to medicine, agriculture, conservation, anthropology and psychology. Three hours of lecture/discussion and three hours of lab per week. Prerequisites: BIO 101/110 and permission of instructor. *Ardia*

BIO 337. Behavioral Ecology. (N)
Behavioral ecology is an integrative discipline that synthesizes ecology, evolution and physiology into the study of the origin and persistence of behaviors. We will study the fitness consequences of behavior, with particular attention to the study of adaptation, sexual selection, evolutionary tradeoffs and constraints and life histories. We will examine the interplay between proximate control and ultimate consequences of behavior. The course will focus heavily on peer-reviewed literature. Prerequisites: BIO 110 and permission of instructor. *Ardia*

BIO 341. Neurochemistry. (N)
An introduction to neurochemistry focusing on cellular and membrane neurochemistry, intercellular and intracellular signaling and neuronal and whole-brain metabolism, with student-driven special topics in development, disease and/or behavior. Current research in these areas will be emphasized through student seminars. Laboratory includes a research project in neurochemistry designed, proposed, pursued and disseminated by small research teams. Prerequisites: BIO/BFB 240 or BIO 230 or BFB 302 and permission of the instructor. *Jinks*

BIO 343. Functional Human Neuroanatomy.
This seminar utilizes a problem-solving approach to learning neuroanatomy by relating structure to function and functional disorders using data from carefully documented clinical cases. Seminar meetings will include student-led clinical case presentations, analysis of clinical localization, analysis of associated neuroimaging and discussion of clinical course and prognosis. The course will culminate with a class-wide debate on the biological basis of the mind. Non-traditional writing will be emphasized. Prerequisite: BIO 240 or BFB/PSY 302 and permission of the instructor. *Jinks*

PSY 350. Primate Behavior.
This course explores the behavior of primates (including humans) in a comparative perspective. We will examine factors shaping behavioral variation within and between primate species, with emphasis on natural history and social behavior. Specific topics include methods for the study of primate behavior, history of primate behavior research, socioecology, foraging, predation, affiliation, aggression, mating, parenting, development, communication, cognition, and conservation. Emphasis will be placed on reading and critiquing primary literature, and on proper scientific writing. Prerequisite: PSY 320/250 or permission. *Same as BFB 350.*

PSY 355. Face Perception with Lab. (N)
An introduction to the study of face perception. This course focuses on the processes which are involved in the perception and recognition of human faces. Specific topics covered include how facial traits influence judgments and the variability in face processing abilities. Prerequisite: PSY 300/230. *Batres*

PSY 351. Biopsychology with Lab. (N)
Behavioral and mental processes as viewed from a biological perspective with particular emphasis upon the role of neurochemical and endocrine factors in central nervous system function. Topics covered will include reproduction and gender, chemical senses and ingestion, emotion, learning, sleep and psychopathology. A neuropharmacological approach to the study of the nervous system will be emphasized. Prerequisite: PSY 100 or SPM 100 or BIO 101/110; and PSY 300/230 or BIO 210. Same as BFB351. Previously PSY302. *Roth, Lacy*

PSY 357. Hormones and Behavior with Lab. (N)
Like many other animals, humans must successfully navigate stressful situations, sex, and other social interactions to survive and reproduce. How do hormones enable, regulate, or modify behavior in these situations? How do behavior and the environment in turn affect hormone function? Do these effects differ across species? We'll develop an understanding of the endocrine system's organization and activation effects by examining, evaluating, and conducting research on humans and other animals. Prerequisites: PSY 100 or BIO 101/110; and PSY 300/230 or BIO 210 or SOC 302. Same as BIO 357 and WGS 357. Previously PSY 303.
Bashaw, Baran

BFB 390. Directed Research in Animal Behavior or Neuroscience.
Gain hands-on experience designing, conducting, and/or presenting a scholarly research project under the direction of a BFB faculty member. Interested students should contact possible faculty supervisors the semester before they plan to enroll. Prerequisite: Permission of faculty supervisor and BFB program chairperson.

PSY 450. Cognitive Development.
In a matter of months, a zygote goes from a collection of cells to a thinking, feeling, learning baby…who quickly goes on to be a walking, talking, problem-solving toddler…who soon after is a reading, writing, socially-aware child. It's breathtaking! This advanced, discussion-focused seminar explores the foundations of cognitive processes and developmental mechanisms that underpin our fantastic human cognitive growth. As we survey major topics in cognitive development, our focus will be primarily on birth through early childhood, asking the question: How do infants and children make sense of the myriad people, ideas, and objects around them? Prerequisite: PSY 202/304 or PSY 305 or PSY 311. *Staff*

PSY 464. Evolution of Mind and Intelligence.
What is intelligent behavior, what is it for, and how did it evolve? We will attempt to answer these questions and understand the nature and development of Mind from a comparative perspective. We will do so by investigating learning, perception, memory, thinking, and language in animals and humans. Research activities and analyses integrated into course work. Prerequisites: BIO 210 or PSY 300/230; and BIO 336, BIO 337, PSY 203, PSY 311, or PSY 320. Previously PSY306. *Roth*

PSY 480. Collaborative Research: Animal Behavior and Models. (N)
Students will work in teams to generate a research question, design a study, earn institutional ethics approval, collect and analyze data, and disseminate

their findings on questions focused on non-human animals. Projects may aim to better understand the animals themselves or use animals as models for human behavior. Research areas within this collaborative course may include any aspect of animal behavior in the field or in the laboratory. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230 or BIO 210; and PSY 203/312, PSY 310, PSY 320/250, PSY 351/302, PSY 357/303, or PSY 464/306; or permission. Same as BFB/SPM 480.
Bashaw, Lacy, Roth

PSY 482. Collaborative Research: Human Behavior/Social or Evolutionary. (N)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include experimental social psychology and/or evolutionary psychology. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 204/319, PSY 206/307, or PSY 309; or permission. *Batres, Knowles*

PSY 483. Collaborative Research: Human Cognition in Context. (N)
Students will conduct experimental research to shed new light on the manifold manifestations of human cognition. This will involve an in-depth consideration of empirical and theoretical issues in cognitive science and cognitive psychology, including embodied and enactive approaches. Research topics will be chosen based on student interest. Techniques for designing, conducting, analyzing, and presenting empirical research will be discussed, practiced, and implemented. Prerequisites: PSY 300/230; and PSY 201/315, PSY 202/304, PSY 203/312, PSY 305, or PSY 311; or permission. *Cuffari, Howard, Rottman*

PSY 486. Collaborative Research: Human Physical and Mental Health. (N)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include psychopathology, health psychology, public health, and/or community psychology. Research topics will reflect student interest and the expertise of the course instructor. Projects use a variety of methods - including both quantitative and qualitative approaches. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 205/317, PSY 208/308, or PSY 357/303; or permission. *Abbott, Penn*

BFB 490. Senior Independent Research.
Independent research under the direction of a BFB faculty member. Prerequisite: Permission of the BFB program chairperson and supervisory faculty member.

BIOLOGY

Professor Peter A. Fields, Chair

Professor Pablo D. Jenik, Associate Chair

Daniel R. Ardia	*Charles A. Dana Professor of Biology*
Kirk Miller	*B.F. Fackenthal Jr. Professor of Biology*
Peter A. Fields	*The Dr. F. Paul & Frances H. Reiff Professor of Biology*
Janet M. Fischer	*The Dr. F. Paul & Frances H. Reiff Professor of Biology*
Joseph T. Thompson	*The Dr. F. Paul & Frances H. Reiff Professor of Biology*
Jaime E. Blair	*Professor of Biology*
Robert N. Jinks	*Professor of Biology*
Clara S. Moore	*Professor of Biology*
Mark H. Olson	*Professor of Biology*
Beckley K. Davis	*Associate Professor of Biology*
Sybil G. Gotsch	*Associate Professor of Biology*
Pablo D. Jenik	*Associate Professor of Biology*
David M. Roberts	*Associate Professor of Biology*
Timothy W. Sipe	*Associate Professor of Biology*
Harriet Okatch (on leave 2022-23)	*Assistant Professor of Biology and Public Health*
Aaron Howard	*Visiting Assistant Professor of Biology*
Jorge Mena-Ali	*Senior Visiting Assistant Professor of Biology, Faculty Don and Director of Faculty Diversity Initiatives*
Andrew Miller	*Adjunct Assistant Professor of Biology*
Ellie Rice	*Director, Quantitative & Science Center and Senior Teaching Professor of Biology*
Stephanie Stoehr	*Biosafety Officer and Teaching Professor of Biology*

The study of biology furnishes insights into our species, our selves and the world of which we are a part. We humans have a fascination for other organisms and the very phenomenon of life. Biology provides us the tools to address questions ranging from how these organisms function at the molecular level to how they interact at the ecological level. Biology is an exciting, expanding discipline offering a broad and advancing frontier between the known and the undiscovered, with a variety of sub-disciplines that span the molecular to organismal to ecological levels of understanding. It is a gateway to diverse and satisfying careers and it provides insights and ways of thinking critical to each individual in society.

Franklin & Marshall's biology program, with required and elective courses in biology as well as courses in mathematics, chemistry and physics, provides students with a firm scientific foundation and enough flexibility to accommodate individual interests. The range of these interests is reflected in the many paths biology majors follow after graduation, with or without further education.

The Biology Department at Franklin & Marshall is made up of diverse and broadly trained faculty members whose research informs their teaching. As befits biology's place in the contemporary world, courses and research provide links to many other disciplines, including chemistry, psychology, physics, mathematics, environmental science, computer science, and public policy. The department participates in several interdisciplinary programs: Biochemistry and Molecular Biology, Bioinformatics, Biological Foundations of Behavior (Neuroscience and Animal Behavior), Environmental Science, Environmental Studies and Public Health.

The central goal of the Biology curriculum is to provide students with the essential research and analytical thinking skills needed by practicing biologists and, indeed, by all citizens in a democratic society. Critical reading of journal articles is an important feature of courses. Beginning in introductory courses, laboratory activities often involve student-designed investigative projects. In more advanced courses, students have access to sophisticated instruments and may spend the entire semester conducting a research project. In addition to learning to design, conduct, and analyze scientific research, students learn essential communication skills as they convey their results in written, spoken, and poster form. These activities lead many students to intensive research experiences during the summer or academic year, under the mentorship of faculty members.

A major in Biology for the class of 2025 and beyond consists of 14 courses. Eight are core and elective courses in

Biology: BIO 101, 102, 200; and five electives. BIO 210 is also required. At least three of the electives must be taken at Franklin & Marshall. At least four of the electives must have a laboratory component. The fifth elective may be a non-lab seminar. Independent Study (BIO 390 or 490) is lab-based and may count for up to two of the five electives. Directed Readings (BIO 391) may count for up to one non-lab elective. The five additional required courses are CHM 111 and 112; PHY 101 or PHY 111; MAT 109; and one additional course from the following: CHM 211, PHY 112, MAT 110, ENE 110, ENE 114, or CPS 111. With permission, PSY 300 or both MAT 216 and 316 may be substituted for BIO 210.

A major in Biochemistry and Molecular Biology includes four biology courses (BIO 101, 102, 200 and 334), six chemistry courses (CHM 111, 112, 211, 212, 321 and 451) and two electives from Biology and/or Chemistry. The electives must be chosen from the following list of courses, unless permission is received from the BMB advisor: BFB 490; BIO 240, 306, 313, 322, 326, 331, 341, 346, 352, 353 some topics courses from 370 – 379, 390 and 490; or CHM 221, 222, 322, 351, 390 and 490. Only one semester of an independent study course (390 or 490) may count as an elective and none of the electives may be a course without a laboratory. Required related courses are PHY 111 and MAT 109 and 110. Biochemistry and Molecular Biology majors may not declare a minor in Chemistry.

The Biological Foundations of Behavior major offers concentrations in Neuroscience and Animal Behavior.

The Environmental Science major combines courses in biology, chemistry and geology to understand the impacts of the human enterprise on natural systems and processes.

The Environmental Studies major combines courses in science and social science to examine environmental issues from cultural, economic, and political perspectives.

The Public Health major is composed of three tracks: one in government/policy; one in sociology; and one in biology. The Biology track provides students with a comprehensive background in biology as well as specific courses in public health and epidemiology.

Opportunities exist for students to design a joint or special studies major in Bioinformatics in consultation with the Associate Chair of Biology and/or the Computer Science Chair.

BIO 101, 102, and 200 are generally prerequisites to most higher-numbered courses.

The writing requirement in the Biology major is met by completion of one elective with a writing component. Regular courses satisfying the writing requirement in the Biology major are BIO 245, 250, 306, 310, 313, 323, 325, 326, 328, 330, 337, 340, 341, 342, 343, 352, 390 and 490. Some topics courses from 370 – 379 also fulfill the writing requirement in the Biology major. (BWR designates courses fulfilling the Biology writing requirement.)

To be considered for honors in Biology, a student must have a GPA of at least 3.30 in the major. In addition, a student must conduct an Independent Study project lasting more than one semester, submit a thesis, and present his or her research publicly as part of the honors defense. A faculty committee will award honors to students whose research demonstrates independence, intellectual engagement, and a deep understanding of the project.

Majors in the Department of Biology have studied abroad in varied programs in recent years, including: Australian National University, Canberra, Australia; University of Melbourne, Australia; University College, London, United Kingdom; School for Field Studies (in various countries); Danish International Study (DIS), Copenhagen, Denmark; School for International Training (in various countries). See the International and Off-Campus Study section of the Catalog or the "Off-Campus Study Opportunities" page of the F&M Biology website for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement. Most Biology courses require one, or some combination of attendance at a research seminar; a poster session presenting research findings; a field trip and additional lab time to work on projects.

101. Evolution, Ecology, and Biodiversity. (N)
This course will examine life at individual/population/community/ecosystem levels through an investigation of evolution and ecology. Topics will include: micro- and macroevolution, the origin and diversification of life on earth, and ecological patterns and processes, including global ecology. No prerequisites. No prerequisites. Offered every semester. May not be taken concurrently with BIO 102.
Fischer, Howard, Olson, Rice, Sipe

102. Cell and Molecular Biology. (N)
This course will examine life at cellular/subcellular levels through investigation of the molecular components of cells and regulation of genetic information. Core concepts will include the physical and chemical properties that govern the assembly and function of biological molecules, information flow from DNA to protein, and the mechanisms that regulate subcellular systems. Lecture topics will be integrated with a laboratory component that emphasizes core skills in molecular biology, including data collection, analysis, and interpretation. No prerequisites. Offered every semester. May not be taken concurrently with BIO 101.
Blair, Davis, Fields, Jenik, Roberts, Stoehr

200. Integrative Biology. (N)
This course will examine how structure and function in multicellular organisms is integrated. We will explore how a single cell develops into the complex, integrated systems of an organism in which groups of differentiated cells perform specific tasks. We will study specialized cell functions in the context of organismal physiology, and including signaling, metabolism, and transport. Using diverse examples from multiple kingdoms, we will explore how tissues, organs, and organisms have adaptations optimized for their environments, in order to utilize resources and to maintain homeostasis despite environmental stresses. Prerequisites: BIO 101 and BIO 102. Offered every semester.
Gotsch, Thompson

210. Biostatistics.
An introduction to descriptive and inferential statistics from the perspective of the life sciences. The emphasis will be on research design and on the use of graphical and computational methods in interpreting and communicating results. This course satisfies the statistics requirement in the Biology major curriculum. Prerequisite: BIO 110.
A. Howard, A. Miller, K. Miller, Olson

240. Neuroscience. (N)
Principles of nervous system function from the molecular through the organ system level as illustrated by the vertebrates and invertebrates. Approximately one half of the course will cover basic cellular principles of nervous system organization, development and physiology. The

remaining lectures will consider the role of functionally identified neural networks in behavior control. Prerequisite: BIO 102 or BFB/PSY 351/302. Offered every Spring. *Same as BFB/PSY/SPM 240*. *Jinks*

245. American Nature Essays. (BWR)
An exploration of the themes, structures, styles and significance of American nature essays. The purposes of the course are to become familiar with nature essays as a distinctive form of interdisciplinary literature, to see the natural world and our place in it through the voices and visions of the best nature essayists, and to develop the arts of perception, reflection and compelling writing. The course includes weekly field trips and workshops in addition to class discussions of essays by more than 20 writers. Prerequisites: BIO 110, ENE 114, ENE 117, or ENE 118. *Same as ENE 245*. *Sipe*

INT 261. Experiential Elementary Science Teaching.
This course will provide academic context and support as students teach science in a local elementary school classroom. Students will work in partnership with the classroom teacher to design engaging, age-appropriate, inquiry-based lesson plans that will be compatible with the School District of Lancaster's designated science content. The course will focus on teaching technique, pedagogy, effective lesson planning, as well as larger issues associated with inclusive classrooms, urban education and inquiry-based approaches to science. Permission of the instructor required. *Bechtel*

305. Genetics. (N)
The study of the transmission, dynamics, and regulation of genetic information. Topics will range from "classical" genetics (Mendel's laws, gene interactions, population genetics), to molecular genetics (DNA mutation and repair, regulation of gene expression, epigenetics), to genomics, bioinformatics and applications (e.g. biotechnology, genetic testing). The laboratory component emphasizes the use of molecular methods in genetics. Prerequisite: BIO 230. Offered Fall 2022 and Spring 2023 *Blair, Mena-Ali*

306. Developmental Biology. (N) (BWR)
An exploration of the developmental mechanisms that allow single cells to divide and differentiate into complex, multicellular organisms. The common processes that underlie development in animals will be examined through historical perspectives, model experimental organisms and current research and technologies. Laboratories will focus on experimental design using invertebrate and vertebrate developmental systems. Prerequisite: BIO 305 or 200. *Moore*

310. Experimental Design in Biology. (BWR)
An exploration of the challenges and rewards of experimentation in biology. In this seminar, we will use case studies to illustrate the basic principles of experimental design, including hypothesis generation, assigning treatments, replication/pseudoreplication, confounded variables and statistical power. Case studies will be chosen to represent a wide range of sub-disciplines of biology, including biomedical research.
Prerequisite: BIO 110 or 101 *Fischer*

313. Introduction to Genome Analysis. (N) (BWR)
An introduction to bioinformatics theory and methods used to generate, annotate, and analyze genomic sequences. The laboratory portion of this course will involve extensive hands-on training to navigate databases and use various software packages for sequence analysis. Students will be expected to discuss and critique primary literature, and will design an independent project to be presented at the end of the semester.
Prerequisite: BIO 305 or 200 *Blair*

320. Animal Behavior with Lab. (N)
An integrative approach to animal behavior from the perspectives of ethology, behavioral ecology, and comparative psychology. The structure, function, development, and evolution of behavioral adaptations including orientation, foraging and predation, communication, social organization, and reproductive strategies. Observational and experimental research required. Outside class time to work on independent research project. Prerequisites: BIO 101/110, and permission of instructor. Corequisites: BIO 210 or PSY 300/230, and permission of the instructor. *Same as PSY/BFB 320*. Previously BIO 250.

322. Microbiology. (N)
This course explores the principles of microbiology including microbial nutrition, metabolism, genetics, ecology, and pathogenicity. Although the emphasis is on Bacteria and Archaea, the course will also include discussion of the protozoa, fungi and viruses. Basic microbiological skills, including microscopy, staining, and techniques used in the isolation and identification of bacteria will be developed in the laboratory.
Prerequisite: Prerequisite: BIO 110 or 101. *Stoehr*

323. Ecological Concepts and Applications. (N) (BWR)
Interactions of organisms with their environment and how these interactions are influenced by human activities. Special emphasis is placed on principles of population, community and ecosystem ecology. Class exercises and discussions involve critical evaluation of current research and applications of ecological concepts to conservation and management. Most labs are field-oriented, including an overnight trip to the Poconos. Prerequisite: BIO 110 or 101. *Fischer*

325. Marine Biology. (N) (BWR)
Application of ecological principles to marine environments. Structural and functional adaptations of marine organisms; and emphasis on the interactions of individuals, populations and communities with physical, chemical and geological processes in the ocean. Includes analysis of primary scientific literature, field and laboratory studies and individual research projects. Prerequisite: BIO 200 or 220. *Fields*

326. Comparative Physiology. (N) (BWR)
Physiological adaptation of animals to the environment, focusing on respiratory, circulatory, digestive and musculoskeletal systems and on the effects of variation in oxygen, temperature and the availability of food and water. Prerequisites: BIO 200 or 220. *Thompson*

328. Physical Biology. (N) (BWR)
Participants in the course will use the basic principles of fluid and solid mechanics, optics, vibration, and electromagnetic fields to analyze the morphology and function of organisms or parts of organisms. Topics will include vision, transparency, navigating and communicating with sound, circulatory systems, swimming and flying, and the mechanical properties of biomaterials, structures, and movement. Prerequisite: BIO 200 or 220. Corequisite: PHY111. *Same as BFB 328*. *Thompson*

330. Advanced Neurobiology. (N) (BWR)
Advanced issues in neuroscience will be explored from a comparative perspective in this lecture/seminar hybrid. The major sensory modalities will be studied—from stimulus transduction to perception—as models of neural processing. Current research in cellular, systems-level, integrative/behavioral and cognitive neuroscience will be emphasized. Laboratory includes an independent research project in neuroscience defined, proposed, pursued and disseminated by small research teams. Prerequisite: BIO/BFB 240. *Same as BFB 330*. *Jinks*

331. Evolutionary Developmental Biology.
Why do animal and plant species look different? What are the developmental mechanisms that generate this morphological diversity? How do modifications of development lead to the production of novel features? How have these processes themselves evolved? The goal of this course is to introduce the students to the concepts and the literature of the recent field of Evo-Devo, the developmental basis of evolutionary change. The course will cover theoretical and experimental aspects, and will use animal and plant case studies. Prerequisite: BIO 305 or 200. *Jenik*

334. Metabolic Biochemistry. (N)
The course focuses on major metabolic pathways and their regulation, with emphasis on flux of metabolites and energy throughout the cell. Topics also include integration of metabolic processes; protein synthesis, modification and degradation; and diseases of metabolism. Presentation and discussion of current primary literature is a key component of the course. The laboratory includes the use of proteomics techniques to examine effects of abiotic stresses on metabolic processes. Prerequisites: BIO 230, CHM 211. Offered every Spring. *Fields*

336. Evolution. (N)
As the unifying principle of biology, evolution integrates levels of biological organization, with a focus on biological changes over time and the evidence of the shared evolutionary history of all living things. Topics

include speciation; extinction; population processes of selection and adaptation, genomics and the molecular basis of evolution; evolutionary developmental biology; sexual selection; life history evolution; and the application of evolution to medicine. Prerequisite: BIO 110 or 101. *Ardia*

337. Behavioral Ecology. (BWR)
Behavioral ecology is an integrative discipline that synthesizes ecology, evolution and physiology into the study of the origin and persistence of behaviors. We will study the fitness consequences of behavior, with particular attention to the study of adaptation, sexual selection, evolutionary tradeoffs and constraints and life histories. We will examine the interplay between proximate control and ultimate consequences of behavior. The course will focus heavily on peer-reviewed literature. Prerequisite: BIO 110 or 101. *Same as BFB 337.* *Ardia*

341. Neurochemistry. (N) (BWR)
An introduction to neurochemistry focusing on cellular and membrane neurochemistry, intercellular and intracellular signaling and neuronal and whole-brain metabolism, with student-driven special topics in development, disease and/or behavior. Current research in these areas will be emphasized through student seminars. Laboratory includes a research project in neurochemistry designed, proposed, pursued and disseminated by small research teams. Prerequisite: BIO/BFB 240 or BIO 230 or BFB 302. *Same as BFB 341.* *Jinks*

343. Functional Human Neuroanatomy. (BWR)
This seminar utilizes a problem-solving approach to learning neuroanatomy by relating structure to function and functional disorders using data from carefully documented clinical cases. Seminar meetings will include clinical case presentations (symptomology), analysis of clinical localization (where is the problem?), analysis of associated radioimaging (CAT scan, MRI, etc.), and discussion of clinical course and prognosis. The course will culminate with a class-wide debate on the biological basis of the mind. Non-traditional writing will be emphasized. Prerequisites: BIO/BFB 240 or PSY/BFB 351/302. *Same as BFB 343.*
Jinks

346. Cancer Biology. (N)
This course focuses on the molecular and cellular events that contribute to human cancers. Topics include oncogenes and tumor suppressors, DNA repair mechanisms, protection from apoptosis, cancer stem cells, and angiogenesis/metastasis. In addition to lecture material, the course will also incorporate primary literature that explores recent advances in our understanding of the molecular nature of cancer, as well as current cancer therapies. The laboratory utilizes an investigative approach that introduces students to molecular techniques widely used in cancer research. Prerequisite: BIO 230 or 200. *Roberts*

352. Advanced Genetics and Epigenetics. (N) (BWR)
This course is intended as a continuation of the themes covered in BIO 305 Genetics. In it we will study more advanced genetic techniques (the Awesome Power of Genetics!) and their use to study a variety of biological problems. We will also focus on the current understanding of the regulation of gene expression by genetic and, particularly, epigenetic factors. The course will have a strong emphasis on reading primary literature. Prerequisite: BIO 305 or 200. *Jenik*

353. Immunobiology. (N)
This course consists of an integrated series of lectures designed to familiarize students with the cellular, molecular and biochemical aspects of immunobiology in the context of immunity, infection and inflammation. Lectures will be supplemented with the analysis of primary literature and student presentations, projects or papers. The first half of the course focuses on the immune system and the function of its major components. The second half focuses on how the various components function during the response to infectious agents and how the system is naturally dysregulated during non-infectious diseases. Topics will include, but are not limited to ontogeny, immune responses to pathogens, vaccine development, tumor immunity and autoimmunity. The laboratory will complement the lectures by introducing students to molecular, cellular and clinical techniques used in modern investigative research. Prerequisite: BIO 230 or 200. *Davis*

354. Epidemiology.
Epidemiology is the study of health and disease of populations. In this course, students will learn methods Epidemiologists use to elucidate relationships between various types of exposures and positive or negative health outcomes; they will also explore methods to trace and predict disease patterns, including epidemics and pandemics. In this course, students will learn how to develop research questions, design ethical studies, conduct sampling for research, perform basic analyses, and minimize bias and other types of error. Prerequisite: PBH251 or permission of instructor. *Same as PBH 354.* *Miller, Okatch*

355. Genetic Susceptibility.
An exploration of inherited predisposition to human disease. This seminar course will introduce examples of disorders with differing frequency, penetrance, expressivity, and age of onset (Down syndrome, cancer). The progress in identification of genes, potential testing, and policy implications in the framework of medical advances and the healthcare system will be explored. Students will then investigate the current status of disorders linked to genetic susceptibility that are less defined or more complex than the selected examples. Prerequisite: BIO220 or 200. *Same as PBH355.* *Moore*

391. Directed Reading.
Exploration of a chosen topic in biology with reading directed by a member of the Biology Department staff. May count as a seminar elective toward the Biology major. Permission of associate chair required.

390 and 490. Independent Study. (BWR)
Independent research directed by the Biology staff at either the junior (390) or senior (490) level. May count as a laboratory elective toward the Biology major. Permission of associate chair required.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Data Science in Ecology and the Environment.
Principles of Biochemistry.
Sports Physiology.
Disease Causing Agents.

BUSINESS, ORGANIZATIONS AND SOCIETY

Professor Nancy Kurland, Chair

Professor Jorida Papakroni, Associate Chair

Alan S. Glazer	*Henry P. and Mary B. Stager Professor of Business*
Nancy Kurland	*Professor of Organization Studies*
Jeffrey Nesteruk	*Professor of Legal Studies*
Jeffrey S. Podoshen	*Professor of Marketing*
Seth Kopchak	*Associate Professor of Finance*
Cynthia L. Krom	*Associate Professor of Accounting and Organizations*
Jorida Papakroni	*Associate Professor of Finance*
William Schneper	*Associate Professor of Organization Studies and Management*
Nicole Young	*Associate Professor of Organizational Behavior*
Jessica Keech	*Assistant Professor of Marketing*
Eunbi Kim (on leave Fall 2022)	*Assistant Professor of International Business*
Conrad Kasperson	*Senior Adjunct Emeritus Professor of Management*
Mike Butler	*Adjunct Assistant Professor of Accounting*

A maximum of one hundred fifteen (115) students from any class may declare a major in Business, Organizations, and Society.

A major in Business, Organizations, and Society is appropriate for students who are interested in studying business and organizational phenomena whether or not they intend to have careers in business. The program emphasizes critical thinking and analysis rather than memorizing techniques. It helps students learn "how to think" about alternative approaches to resolving issues, not simply "how to do" problems, although there are skill components within the program. Multidisciplinary approaches to problem solving are stressed by examining organizational issues from a variety of perspectives.

The courses are designed to help students develop a broad understanding of organizations and their roles in society. Students are exposed to many management philosophies, processes and styles, as well as the dynamic interface between theory and practice. They are required to complete four curricular components: an entry course; a breadth requirement composed of eight courses; a three-course, individually designed interdisciplinary cluster that provides the opportunity to develop depth of understanding in one area of organizational activity, such as management, finance, marketing, human resources, organizational ethics or international business; and a senior seminar.

A major in the Department of Business, Organizations and Society consists of the following courses: BOS 200, 224, 250 or the equivalent, 315, 324, 332, 341, 360 and 480; ECO 100; and MAT 109 or the equivalent. In addition, students, in consultation with their advisers, select three courses that provide depth of analysis in an area of organizational study. At least one of the three courses must be from outside the Department and all must be at or above the 200 level.

A joint major in Business, Organizations and Society and Environmental Studies must include must include BOS 200, 224, 250 or the equivalent, 335 and 360; ECO 100; MAT 109 or the equivalent; and one additional 300-level BOS course.

A joint major in Business, Organizations and Society and a foreign language or International Studies must include BOS 200, 224, 250 or the equivalent, 350, and 360; ECO 100; MAT 109 or the equivalent; and one additional 300-level BOS course.

A joint major in Business, Organizations and Society and Public Policy must include BOS 200, 224, and 360; MAT 109 or the equivalent; and four additional 300-level BOS courses.

A joint major in Business, Organizations and Society and other subjects not listed above must include BOS 200, 224, 250 or the equivalent and 360; ECO 100; MAT 109 or the equivalent; and two additional 300-level BOS courses.

Students interested in business are encouraged to consider Students interested in business are encouraged to consider a study abroad or off-campus study experience to enhance their knowledge of the field. Majors in the Department of Business, Organizations and Society have recently attended universities such as the London School of Economics and Political Science through the Institute for Study Abroad, Butler University; DIS Study Abroad in Scandinavia and IES Abroad programs in locations around the world; and internship programs through Boston University in Paris and London.

The writing requirement in the Business, Organizations, and Society major is met by completion of the normal courses required to complete the major.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

200. Strategies for Organizing. (S)
Introduces students to the changing roles and relationships of business, organizations and society. Coupling theories of business strategy with a variety of critical perspectives, this course aims to provide students with a rich multidisciplinary framework for understanding deeply, thinking creatively, and acting effectively in our dynamic, competitive environment. Emphasizing the interplay between theory and practice, each section of BOS 200 may offer students a distinctive field experience or special project. *Kim, Kurland, Schneper*

224. Accounting for Decision Making. (S)
Accounting concepts, standards and procedures involved in income determination and asset, liability and owners' equity measurement and reporting. Emphasis on the role of accounting information in investment decisions. Pre- or corequisite: BOS 200. *Butler, Glazer*

250. Quantitative Methods. (S)
Gives students the tools necessary to engage in research as well as the ability to read and understand the research done by others. Includes an exploration of the scientific method, theory construction, hypothesis development and statistical tests used to evaluate them. Focus is on issues in the social sciences, particularly business organizations. Not open to students who have taken BIO 210, ECO 210, GOV 250, MAT 215/216, PSY 230, or SOC 302. *Kopchak*

253. Art, Capitalism, and Markets. (A)
Why make, buy and sell art, and how? An examination of the production and consumption of art in capitalist economies. Considers what socially crucial functions art can serve, and how it gets paid for and distributed once markets rather than specific patrons become the main financial support. Historical and recent case studies from the early capitalism of Rembrandt's 17th-century Holland, to 19th-century American attempts to build democratic art institutions, to the popular art of Norman Rockwell and Thomas Kinkade and others, to present-day galleries and auction houses. Students who want to do so will have an opportunity to research and purchase a work of art, either on line, at auction, or from a dealer. *Same as ART 253* *Clapper*

286. Social Entrepreneurship. (S)
Social impact investing and business growth will drive human survival in the next 100 years. Resource scarcity is reaching critical levels. The businessperson of the future will have to think in new and different ways, balance multiple interests and lead an increasingly diverse and multinational team. Understanding cultural motivations, legal and regulatory challenges and organizational theory are critical components for success in start-ups and mature companies. Throughout the semester, students will (1) analyze theories underlying today's business culture (including the cycles of entrepreneurship through time), (2) explore how law, anthropology and finance intersect to create new thought leadership and (3) deconstruct a social impact investment and business plan to learn how modern entrepreneurship functions. The course will culminate with a research paper in which students will analyze a current start-up using theories discussed throughout the semester and predict future success and challenges for it and its industry. *Staff*

305. Business Spanish. (H)
This course aims at preparing students to conduct commercial operations in today's Spanish-speaking world and the Hispanic/Latinx community in the U.S. Students will learn about key business topics and terminology and engage in situational practices commonly used in the Spanish-speaking countries. They will also critically examine case studies and discuss the cultural forces (historical setting, social values, gender relations, among others) that model the business practices of the target population. Spanish is the primary language of instruction. Pre-requisites: SPA 221 and SPA 222 or permission by professor. *Same as SPA 305*. *Liu*

315. Organizational Behavior. (S)
Multidisciplinary study of the formal organization. Topics include concepts and theories related to how individuals, groups and structural attributes influence the performance of organizations.
Prerequisite: BOS 200. *Young*

316. Human Resources Management. (S)
Traditional areas and responsibilities of personnel/human resources management. Compliance with federal regulation of the workplace; planning, selection and staffing; training and development; performance appraisal; compensation; labor history; and labor relations.
Prerequisite: BOS 315. *Young*

324. Analysis and Control Systems. (S)
Exploration of current costing systems and the role of costs in performance measurement, budgeting and managerial decision-making. Examination of cost behavior and the use of cost analysis tools. Extensive use of cases in discussion of cost management topics including target costing and pricing decisions in decentralized operations, outsourcing, activity-based costing and budgeting, flexible manufacturing and environmental and quality costs. Prerequisite: BOS 224. *Krom*

325. Financial Reporting and Analysis. (S)
This course explores the use of generally accepted accounting principles (GAAP) in financial reports and how well those principles reflect the underlying economic reality of an organization. Students will also gain experience analyzing actual financial reports and other publicly available information in order to assess an organization's earnings, financial position and cash flows. Prerequisites: BOS 224 and 360. *Glazer*

332. Law, Ethics and Society. (S)
Explores the nature of individual obligation and professional accountability in our complex, commercial society. We will begin by examining the minimal social expectations embodied in legal doctrines and principles. We will then turn to explore our broader social responsibilities by drawing upon the norms and values necessary for a vibrant civil society. The aim is to gain a richer understanding of how to lead morally satisfying and civically engaged professional lives. *Nesteruk, Staff*

335. Business and the Natural Environment. (S)
Widespread concern for a cleaner environment and sustainable practices has put new demands on business. Exploration of philosophical, theoretical, strategic and policy issues facing organizations in relation to the natural environment. *Same as ENE 335, PUB 335*. *Kurland*

341. Marketing. (S)
Integrated, analytical approach to macro- and micro-marketing and marketing management. Problems and case studies are used to analyze marketing opportunities, strategic planning of profit and not-for-profit organizations in accordance with a societal marketing concept. Open to juniors and seniors only. Prerequisite: BOS 200 and BOS 250.
Kasperson, Keech

345. Consumer Psychology. (S)
This course looks to explore answers to the question of "Why We Buy?". Students will attempt to identify what makes consumers, emotionally and cognitively, act in the way that they do. This course integrates material, theory and perspectives from the fields of Marketing, Psychology, Sociology, Anthropology and Statistics in an effort to give the student a holistic examination of consumer behavior in the 21st century. *Podoshen*

350. International Business. (S) (WP)
Students in this course will learn about the history of international business, investigate the political and economic institutions that structure the global economy, and explore the impact of international environments on firm-level decisions. *Same as IST 350*. *Kim*

360. Finance. (S)
Theoretical concepts and analytical techniques of corporate finance. Topics include management of working capital, capital budgeting and cost of capital and capital structure planning. Open to juniors and seniors only. Prerequisites: BOS 224, BOS 250, ECO 100 and MAT 109
Papakroni

361. Securities Analysis. (S)
Formulation of investment policies for individuals, firms and institutions; analysis of securities; operation of the securities markets.
Prerequisite: BOS 360.

363. Portfolio Management. (S)
Students responsible for the Student-Managed Investment Fund, a portfolio of financial assets that is part of the College's endowment funds. Students use finance and investment theories and practices introduced in the business finance and investment courses and examine how other fields of business contribute to more informed investment decision-making. Prerequisites: BOS 361 and permission of the instructor. *Papakroni*

385. Gender at Work. (S)
What is women's work? How has it changed over the course of American history? How is it valued? This course explores the world of women's work by comparing it to "men's" work. We will focus on wage earning, caregiving, sex work, housework, "double days" and "glass ceilings." We will especially consider women's strategies of survival and resistance from various demographic, racial and ethnic groups. *Same as AMS/WGS 385* *Deslippe*

391. Directed Readings.
Exploration of a specific topic in organization studies through readings chosen and directed by a member of the Department of Business, Organizations, and Society faculty. Permission of the chairperson is required. *Staff*

370–379, 470–479. Topics in Business, Organizations, and Society. (S)
Study of specific aspects of business and other types of organizations. Topics change from year to year. Permission of instructor usually required. *Staff*

480. Issues Facing Organizations in the 21st Century. (S)
This course is a senior seminar for majors. Various course sections use a different multi-disciplinary "theme." All sections require that students undertake a semester-long project as the culmination of their academic program. Projects may be individual or group based. Contemporary issues are used to create discussion and debate. Permission to enroll is determined by the student's adviser and the instructor. *Staff*

490. Independent Study. (S)
Independent study directed by the Business, Organizations, and Society staff. Permission of chairperson

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Business in Germany.
Success and Motivation.

CHEMISTRY

Professor Scott H. Brewer, Chair

Jennifer L. Morford	*Charles A. Dana Professor of Chemistry*
Scott H. Brewer	*Professor of Chemistry*
Edward E. Fenlon (on leave Spring 2023)	*Professor of Chemistry*
Kenneth R. Hess (on leave Fall 2022)	*Professor of Chemistry*
Richard S. Moog (Fall 2022 only)	*Professor of Chemistry*
Katherine E. Plass	*Professor of Chemistry*
Marcus W. Thomsen	*Professor of Chemistry*
Scott A. Van Arman	*Professor of Chemistry*
Gabriel S. Brandt	*Associate Professor of Chemistry*
Christine P. Phillips-Piro	*Associate Professor of Chemistry*
Davide Lionetti	*Assistant Professor of Chemistry*
Sarah Z. Tasker	*Assistant Professor of Chemistry*

Chemistry is the study of matter and the changes it undergoes and, as such, is essential to the study and understanding of physical, geological and biological phenomena. Because of its place among the sciences, chemistry is inherently interdisciplinary and attracts students to its study from a broad range of related interests.

The chemistry major at Franklin & Marshall College is led by faculty who are committed to helping the student "learn how to learn." In addition to acquiring an understanding of the basic concepts of chemistry, majors hone the skills necessary for critical and analytical thinking and develop their ability to communicate observations and discoveries through the printed and spoken word.

Through coursework, chemistry majors gain an understanding of transformations and reactions at the atomic, molecular and macromolecular scales, the energetics associated with those changes and the analytical techniques used to study them. By involvement in the ongoing research of chemistry faculty members, students have extraordinary opportunities to study new reactions and properties of matter and to make original contributions to the literature. As a consequence, knowledge gained from coursework is deepened and enriched by the research experience, which immerses the student in the methodology of scientific discovery and the creative process. The confidence and independence engendered by the chemistry major allow students to pursue a wide variety of opportunities beyond graduation.

A major in Chemistry consists of 15 course credits, including at least 10 course credits in chemistry. Required courses are:

CHM 111, 112, 211, 212, 221, 222, 321.

PHY 111, 112; MAT 109, 110.

The chemistry major may be completed with the required courses and the following additional courses:

At least one course selected from CHM 322 or CHM 351.

One credit in Chemistry numbered 410–479.

Two additional course credits in chemistry, or one additional credit in chemistry and one course credit outside chemistry approved by the department. Approved courses outside of chemistry include BIO 305; ENE/GEO 321; PHY 222, 223.

CHM 390 or 490 is encouraged but no more than one such course credit may be applied toward the requirements for the major.

A student interested in an emphasis in biochemistry should complete the major by taking Chemistry of Life (CHM 351) and Biochemical and Biophysical Techniques (CHM 451).

If a student is interested in completing the **American Chemical Society (ACS) certified major** in Chemistry, the student must complete the major as described above and typically the following stipulations: completion of both CHM 322 and CHM 351 and a research experience (CHM 390, 490, or summer research). Full details of the requirements should be discussed with the Chair.

A minor in Chemistry requires CHM 111 and 112 plus four additional chemistry credits (including no more than one credit of CHM 390 or 490).

To be considered for Honors in chemistry the student must be nominated by the research mentor on the basis of work done in the CHM 490 and may include research completed during the summer preceding the senior year. Criteria to be met include an unusual commitment of time and effort, results that are publishable and are likely to have been presented at a scientific meeting, independent contributions to the project from the student, a well-written thesis that conforms to departmental guidelines and a successful defense of the project before a faculty committee.

Majors in the Department of Chemistry regularly engage in study abroad as part of their college experience. Over the past decade, students have studied at the following institutions: University of Otago, New Zealand; University of Strathclyde, Scotland; Trinity College, Ireland; University of Sheffield, England; University of New South Wales, Australia; University of Grenoble, France; Lancaster University, England; Oxford University, England; University of Bristol, England. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

111. General Chemistry I: Picturing the Atomic World. (N)
In chemistry, we picture the world around us on both the macroscopic level (the things we see with our eyes) and the microscopic level (in which all matter is made of atoms). The different compositions of atoms result in the various elements, each with their own unique properties. Individual atoms combine to create molecules; the structure of atoms and molecules determines how they function. A variety of models will be used to conceptualize and contrast the behavior of individual atoms and molecules relative to the behaviors we observe in various states of matter. We also introduce and apply chemical equations as a way to describe the rearrangement of atoms in chemical transformations. Students will develop problem-solving skills, effective learning strategies, and mathematical reasoning. Lab work focuses on techniques such as synthesis, purification, separation, and identification of substances and begins to develop critical thinking skills that are crucial for scientific research and inquiry. Students will learn methods for data analysis, presentation of data to support a conclusion, and effective writing to communicate results. Multiple sections offered every Fall with one section offered every Spring.
Brandt, Morford, Moog, Plass, Van Arman

112. General Chemistry II: Reactions in the Atomic World. (N)
Rearrangement of atoms through chemical reactions drives many of the changes we see around us. Chemical reactions influence biology, geology, and technology; they are central to everything from the functioning of a cell to the weathering of mountainsides to the capacity of solar cells. This course will examine the proportion of starting materials and products in chemical reactions, as described by chemical equilibrium. Quantitative and qualitative models will be developed to understand chemical equilibrium, and these will be applied to crucial facets of chemistry, including ionic precipitation, acid–base, and reduction–oxidation reactions. Models will be introduced to describe rates of reactions through studying kinetics. Students will enhance the problem-solving skills, effective learning strategies, and mathematical reasoning introduced in General Chemistry I. Lab work builds additional qualitative and quantitative skills and focuses on techniques to identify unknown chemicals and to monitor the speed or extent of reactions. Students will work to improve their abilities to make and defend scientific arguments, with a focus on clear and effective visualization of quantitative data. Prerequisite: CHM 111. Multiple sections offered every Spring with one section offered every Fall.
Brewer, Hess, Lionetti, Phillips-Piro, Tasker

211. Organic Chemistry I: Structure and Function of Carbon-Containing Compounds. (N)
Organic chemistry is the study and synthesis of carbon-based compounds. While that might at first sound limited, carbon is the most versatile element in the world around us, central to pharmaceutical drugs, flavors and fragrances, plastics, and life itself (since proteins and DNA are large organic molecules). Building on students' basic knowledge of structure and reactivity gained in general chemistry, this course takes a qualitative, pattern-driven approach to understanding why organic molecules react in certain ways. Structure is the focus of the first half, understanding how the distribution of electron density leads to reactivity and learning how to visually represent the 3D world of organic molecules in two dimensions. The second half of the course delves into reactions of particular classes of molecules, building towards designing multi-step syntheses—making complex molecules from simple starting materials. Lab work focuses on the fundamentals of purification, spectroscopic analysis and identification of unknown compounds, and performing some of the chemical reactions learned in class, while also initiating the development of independent laboratory decision-making skills. Students will further develop skills in writing lab reports using formal scientific conventions. Prerequisite: CHM 112. Offered every Fall. *Fenlon, Tasker, Thomsen*

212. Organic Chemistry II: Reactivity and Synthesis of Organic Molecules. (N)
Having established fundamental skills to interpret organic structure and reactivity in Organic Chemistry I, this course dives deeper into the vast universe of organic reactions. Particular focus is placed on aromatic chemistry (central to most small-molecule drugs) and on carbonyl chemistry (the fundamental building block of proteins and sugars). Students will draw complex mechanisms to describe how these organic molecules react through a series of intermediates, and will develop their synthetic design skills by incorporating these reactions into longer multi-step syntheses. Organic reactions will also be placed in the context of modern research with reference to the primary chemical literature. Lab work focuses on separation and identification of a series of unknown compounds independently, as well as multi-step synthesis projects. In these projects student independence and decision-making are emphasized. Prerequisite: CHM 211. Offered every Spring.
Thomsen, Van Arman

221. Chemical Analysis. (N)
Chemical analysis has long played an important role to determine the composition and nature of materials, in order to answer fundamental research questions and solve real-world problems. Its modern importance stems from new applications in and new questions arising from interdisciplinary fields, such as biochemistry, environmental chemistry, forensics, and pharmaceutical analysis. This course introduces fundamental principles of chemical analysis including methods of calibration and considerations of error. Building on previous courses, a more sophisticated approach to solution equilibria will be applied to acid–base theory, complexation reactions, and electrochemistry. This scaffold of fundamental concepts provides a framework from which to build an understanding of the complexities associated with real systems, such as in rivers or cells. Students will investigate the current application of chemical analysis through the primary literature. Lab work that is relevant to modern applications will include instrumental methods and classical experimental techniques with an emphasis on an appropriate statistical interpretation of results. Prerequisite: CHM 112. Offered every Spring.
Morford

222. Inorganic Chemistry: Chemistry Across the Periodic Table. (N)
Technological devices like solar cells, catalysts, and batteries rely on inorganic materials constructed from elements across the whole periodic table; likewise metal-containing cofactors play key roles in biochemical processes like respiration and photosynthesis. We will develop complementary scientific models of geometry, electronic structure, and reactivity to accommodate this range of different elements and diverse applications. Furthermore, we will learn how to decide when it is, and is not, appropriate to apply each of these models, a critical skill due to the broad variations in properties across the periodic table. In particular, we will develop an understanding of electronic structure that will connect the chemistry and geometry of inorganic compounds to technologically important properties such as light absorption and catalysis. Special attention will be paid to two classes of compounds: solid-state materials and transition metal complexes. Such compounds will be synthesized and characterized through a variety of state-of-the art instrumental techniques in the laboratory. The laboratory will include a professional poster session to develop visual communication skills. Prerequisite: CHM 211 or permission of the instructor. Offered every Fall. *Lionetti*

321. Thermodynamics and Kinetics. (N)
Why is the boiling point of water raised when salt is dissolved in it? Why can the rate law for a chemical reaction change under differing experimental conditions? Why does the equilibrium constant expression for a chemical reaction have the form that it has? These questions (and many others) will be answered through a more in-depth discussion of thermodynamics and kinetics than undertaken in previous courses. The three laws of thermodynamics, which summarize an enormous body of experimental data and have no known exceptions, will be presented and investigated. These laws will be applied to examine spontaneity, chemical equilibrium, phase equilibrium, phase diagrams, and systems of variable composition. The kinetics and mechanisms of reactions, in addition to theories of reaction rate, will also be explored. In the laboratory, students will work in teams to develop and apply their own experimental protocols

focused on the determination of thermodynamic and/or kinetic parameters of chemical and biochemical systems. Prerequisites: CHM 112, MAT 110, PHY 111 (or PHY 111 may be a corequisite with permission of the instructor). Offered every Fall. *Brewer*

322. Quantum Chemistry: Structure, Bonding, and Spectroscopy. (N)
The development of a robust theoretical framework for the structure of atoms and molecules in the twentieth century provides the basis for the advent of much of modern society—from lasers to computers to modern imaging techniques to drug design. This course will provide an introduction to this framework, quantum mechanics, as it applies to chemistry. Quantum mechanics provides the current understanding of atomic structure, molecular bonding, and spectroscopy. The postulates of quantum mechanics will be introduced and utilized to describe the structure of the hydrogen atom and polyelectronic atoms in addition to chemical bonding through molecular orbital theory. The theory behind vibrational and rotational spectroscopy will be developed and used to extract structural parameters such as bond lengths from the spectra of small molecules. The laboratory portion of the course will focus on computational aspects of quantum chemistry. Prerequisites: CHM 222, MAT 110, PHY 112 (or PHY 112 may be a corequisite with permission of the instructor). Offered in Spring of even-numbered years. *Brewer*

323. Medicinal Chemistry. (half-course)
The mechanism of action of several classes of drugs. The discovery (e.g., natural products, rational design, combinatorial chemistry), structure-activity relationships, and synthesis of drugs will be covered. The role of the FDA, ethical issues, and economic pressures in relation to drug pricing, approval, and manufacture will be discussed (no lab). Prerequisite: CHM212. *Fenlon*

342. Environmental Chemistry.
Chemistry of the atmosphere, hydrosphere and terrestrial environments. Discussion of the chemical basis underlying environmental processes, including chemical composition, thermodynamic and kinetic controls, photochemical, oxidation and reduction reactions, aquo complexes and acid-base behavior. Use of scientific literature to investigate current topics pertaining to environmental chemistry. Prerequisite: CHM112 and one of the following: CHM221, CHM212, GEO226, GEO326, BIO220, BIO323 *Morford*

351. Chemistry of Life. (N)
This course will explore the structures and functions of biological molecules including proteins, lipids, carbohydrates, and nucleic acids. The chemical transformations performed by enzymes, the cellular machines that create and break down molecules, will be explored in terms of intermolecular forces, reaction mechanisms, kinetics, and structure. Students will explore the molecular underpinnings of a disease through scientific writing of a short literature report that will include work on visual design of figures. The goal of the laboratory is for students to carry out novel experiments focused on protein biochemistry—creating and purifying recombinant versions of a protein of interest, determining their activity and attempting to solve their crystal structures. Prerequisite: CHM 212. Offered every Fall. *Brandt*

370–379. Topics in Chemistry.
Study of specialized areas of chemistry. *Staff*

390. Directed Study in Chemical Research.
Students collaborate with a faculty member to work on a chemical research project, typically over the course of a single semester. Throughout this experience students will engage with the associated chemical literature and will assist with designing, executing, and interpreting experiments. This experience concludes with a written research paper. Interested students should discuss potential projects with chemistry faculty members. Permission of instructor and chairperson required. A student may only use one credit earned from CHM 390 or CHM 490 to satisfy a major requirement. *Staff*

412. Materials Chemistry.
Students will apply and integrate their prior chemistry knowledge to explore the relationships between the properties of technological devices and their component materials through reading recent scientific papers. This capstone course is designed to help students transition out of formal education and prepare them for the next step in their careers. Students will practice identifying and quickly learning new concepts as needed. Not only will students develop original research ideas, they will learn to communicate their ideas in compelling and convincing ways to different audiences. The course will provide practice in communication skills such as oral presentation and visual design. Open only to senior Chemistry majors. Prerequisites: CHM 212, CHM 222, CHM 32., Prerequisite or corequisite: CHM 221. Offered Spring 2023. *Plass*

451. Biochemical and Biophysical Techniques.
Students will apply and integrate their prior chemistry and biochemistry knowledge to explore biological systems through reading recent scientific papers. This capstone course is designed to help students transition out of formal education and prepare them for the next step in their careers. The capabilities and limitations of modern experimental tools will be a theme throughout. Students will practice identifying and quickly learning new concepts as needed. Not only will students develop original research ideas, they will learn to communicate their ideas in compelling and convincing ways to different audiences. The course will provide practice in communication skills such as oral presentation and visual design. Open to senior Chemistry and Biochemistry and Molecular Biology majors and offered every Spring. Prerequisites: CHM 321, CHM 212 and either CHM 351 or BIO 334. *Phillips-Piro*

490. Independent Study in Chemical Research.
Students collaborate with a faculty member for two consecutive semesters to address an open-ended chemical research project, developing crucial professional and intellectual skills. Students read and analyze the relevant chemical literature, and in collaboration with the faculty advisor devise a series of experiments to address the research question. Students carry out necessary experiments by learning the research techniques appropriate to the work. Finally, students interpret and represent data to address the original question and convey their results through oral presentations and written reports. Interested students should discuss potential projects with chemistry faculty members. One course credit earned each semester. Permission of instructor and chairperson required. A student may only use one credit earned from CHM 390 or CHM 490 to satisfy a major requirement. *Staff*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Total Synthesis of Natural Products.

CHINESE LANGUAGE

Professor Jonathan Stone, Chair, Department of German, Russian & East Asian Languages

With nearly a billion speakers, Chinese is the language spoken by the most people on earth. The ability to speak this language has never been more valuable, as growing interest in China is matched only by its growing influence.

The Chinese Program offers Franklin & Marshall students excellent opportunities to learn the Chinese language, study its history, and experience China's beautiful and unique culture.

In this program, students will receive intensive language training in the classroom and the learning experience will be greatly enhanced by after-class activities such as individual sessions with native speakers, culture-related activities, field trips and opportunities for study abroad.

Students enjoy optimum opportunities to develop and practice their speaking, writing and listening skills. Faculty recommend two consecutive years of study to develop fluency and to obtain a solid understanding of the history and culture of China.

Off-campus study programs most frequently attended by students during the past two years include: Institute for Study Abroad (IFSA), Shanghai, China; The Alliance for Global Education, Shanghai, China; CET Kunming, China; School for International Training (SIT) China; Middlebury Beijing, China.

An Area Studies minor in Asian Studies (China) may be arranged by contacting Hongchang Yao, Director, Chinese Language Program.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

101. Elementary Chinese I.
Introduction to contemporary Mandarin within its cultural context. Developing listening, speaking, reading and writing skills. For students with no previous training in the language. Offered every Fall. *Staff*

102. Elementary Chinese II.
Continued development of listening, speaking, reading and writing skills in Mandarin in a cultural context. Prerequisite: CHN 101 or permission of the instructor. Offered every Spring. *Staff*

201. Intermediate Chinese I. (NW) (LS)
Continued development of contemporary Mandarin listening, speaking, reading and writing skills in a cultural context, including continued practice in reading and writing characters. Prerequisite: CHN 102 or permission of instructor. Offered every Fall. *Staff*

202. Intermediate Chinese II. (H) (NW) (LS)
Continued development of contemporary Mandarin listening, speaking, reading and writing skills in a cultural context, including continued practice in reading and writing characters. Prerequisite: CHN 201 or permission of instructor. Offered every Spring. *Staff*

235. Mystery of Chinese Characters. (NW)
This course is designed for students who have had some Chinese language learning experience understanding the basic knowledge of pronunciation, structure and formation of Chinese characters, and wish to learn more about Chinese Characters from a historical and systematic perspective and the rich culture they represent. Prerequisite: CHN 101 *Staff*

301. Upper Intermediate Chinese I. (H) (NW) (LS)
This course is for students with at least two years of prior classroom experience in Chinese. It is designed to further develop students' overall Chinese proficiency and expand their knowledge of Chinese culture through reading and discussing culturally relevant newspaper and magazine articles about current affairs in China. Development of spoken and writing skills will be further reinforced through oral presentations and essay writing. Prerequisite: CHN 202. *Staff*

302. Upper Intermediate Chinese II. (H) (NW) (LS)
This course is a continuation of CHN 301 which is designed to further develop students' overall Chinese proficiency through reading and discussing culturally relevant newspaper and magazine articles about current affairs. Development of reading and writing skills will be further reinforced through oral presentations and essay writing. Prerequisite: CHN 301 or permission of instructor. *Staff*

CLASSICS

Professor Gretchen Meyers, Chair (Fall)
Professor Alexis Castor, Chair (Spring)

Zachary P. Biles (on leave 2022-23)	*Professor of Classics*
Alexis Q. Castor (on leave Fall 2022)	*Professor of Classics*
Shawn O'Bryhim	*Professor of Classics*
Gretchen E. Meyers	*Associate Professor of Classics*

The Department of Classics provides instruction in Greek, Latin, ancient history and classical art and archaeology. Classics is an interdisciplinary area studies program, applying the approaches of humanists and social scientists to the history, art, language, literature, philosophy, religion, social structures, economy, everyday life and government of the ancient Mediterranean. Classics students learn how to weigh and assimilate information from a variety of media and disciplines in order to become productive and thoughtful citizens of a rapidly changing world.

Students majoring in "Classics" select one of two tracks, either "Classical Society" or "Classical Languages and Literatures," depending on whether their interests in Greece and Rome incline more towards social scientific approaches or linguistic and literary studies. Students in both tracks share a common core of coursework that ensures familiarity with major disciplinary approaches contained in Classics.

COURSEWORK REQUIRED FOR A MAJOR IN CLASSICS

Classical Languages and Literatures: 10 courses distributed as follows:

8 courses in Greek and Latin (at least 2 courses must be taken in each language, i.e. to 102 or above depending on point of placement, and 2 courses must be at the 300 level)

2 courses from two of the three subject areas of History (CLS 113, 114), Archaeology (CLS 115, 117), Literature in English translation (CLS 230 and other CLS literature courses)

Classical Society: 11 courses distributed as follows:

1 introductory history course (CLS 113 or 114)

1 introductory archaeology course (CLS 115 or 117)

2 courses in Greek or Latin, i.e. either language to the 102 level or from point of placement

1 200-level CLS literature course

3 electives in any 200-level (or above) GRK, LAT, CLS courses or other approved courses (e.g. in philosophy, political science, art history, religious studies)

2 300-level CLS courses

A minor in Classics is earned by taking 6 courses, 4 of which must be in one of the three subject areas of Classics coursework, i.e. Greek (GRK), Latin (LAT), Archaeology and History (CLS). Only three 100-level courses may be counted toward the minor, and one course must be at the 300-level.

Majors in the Department of Classics have studied abroad in the following programs in recent years: American School of Classical Studies at Athens (Summer Program); College Year in Athens; Intercollegiate Center for Classical Studies in Rome; Advanced Studies in England, Bath; Arcadia University in Greece; departmental summer programs in Italy and Greece. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

COURSES IN ENGLISH

Designated as "Classics," the following courses require no knowledge of Greek or Latin, unless otherwise indicated.

113. The History of Ancient Greece. (S)
Ancient Greece from the Bronze Age to the death of Alexander the Great in the Mediterranean and Near Eastern context. Students are also introduced to the problems and methods of historical inquiry. *Same as HIS 113.* *Castor*

114. The History of Ancient Rome. (S)
The transformation from Republic to Principate and the collapse of the empire are explored. Students are also introduced to the problems and methods of historical inquiry. *Same as HIS 114.* *Castor*

115. Greek Art and Archaeology. (A)
This course provides an overview of the archaeological monuments of ancient Greece. Coursework will focus on methodological approaches to analyzing building techniques, trends, styles and the social, political and religious functions of art and monumental architecture in ancient Greek society. Topics covered in lecture and classroom discussion will include archaeological and art historical interpretations of sacred and public architecture, urbanism, three-dimensional sculpture, relief sculpture, painting and decorative arts. *Same as ART 115.* *Meyers, Castor*

117. Roman Art and Archaeology. (A)
This course provides an overview of the archaeological monuments of ancient Rome. Coursework will focus on methodological approaches to analyzing building techniques, trends, styles and the social, political and religious functions of art and monumental architecture in ancient Roman society. Topics covered in lecture and classroom discussion will include archaeological and art historical interpretations of sacred and public architecture, urbanism, three-dimensional sculpture, relief sculpture, painting and decorative arts. *Same as ART 117.* *Meyers*

210. History of Ancient Philosophy. (H)
How should one live? What is happiness for a human being? These questions are the focus of the philosophy of Socrates, Plato, and Aristotle. In the work of these thinkers, such questions lead to wide ranging philosophical inquiry in ethics, moral psychology, epistemology, metaphysics, political theory, aesthetics, and beyond. This course surveys their main arguments and theories, which became the cornerstone of the western European philosophical tradition. *Same as PHI 210.* *Franklin*

230. Classical Myth. (H)
Introduction to the myths of ancient Greece and Rome and their relationship to the art, history, philosophy and religions of their respective cultures. Students will explore the Classical conception of the interactions between mortals, heroes and divinities through a wide range of media and textual genres. Connections between Greek and Roman myths as well as the adaptation of mythical traditions from Near East cultures will be discussed. *Staff*

231. Ancient Laughter. (H)
This course is an introduction to the comic traditions of Greece and Rome. Students will become familiar with the characteristics, development, and social interests of comic literature; additionally, considerable emphasis will be on the analysis of organizing themes and the literary quality of these works through close readings and discussion. *Same as LIT 231.*
Biles, O'Bryhim

240. Race in the Ancient Mediterranean. (S)
We think of the Classical world mainly in terms of Greece and Rome, but these cultures thrived in a densely populated Mediterranean that touches three different continents. This class explores the complexities of an interconnected world with special emphasis on differences (today we call some of these identities "race" and "ethnicity"). We will study Greek and Roman art and texts as well as select archaeological evidence for these regions and cultures. We will also consider how modern racial and ethnic identities have selectively adopted elements of the Classical world to support their own heritage claims. Offered every other year. *Castor*

241. Ancient Medicine. (H) (NSP)
This course is an introduction to the origins and development of Western medicine in Ancient Greece and Rome. Students will read from the sources of the ancient theories and practices of medicine, including epic literature, pre-Hippocratic texts, the Hippocratic corpus, and a number of works by Galen, widely considered the most accomplished medical researcher in antiquity. These texts will be complemented by selections of texts by the PreSocratics, Plato, and Aristotle that reflect a reciprocal borrowing of vocabulary, argumentation, and diagnostic methodologies between the developing "art of healing" and various classical philosophical texts. All readings will be in English. *Same as STS 241.*

242. Gender and Sexuality in Antiquity. (H)
The aim of this course is to explore the cultural constructions of gender and sexuality in the ancient societies of Greece and Rome. We will approach questions such as the status of women and the context of misogyny, the societal role of same-sex relations, the presentation and visualization of sexuality, desire and the body. We will examine archaeological, visual and literary evidence through assigned reading and class discussion. This interdisciplinary approach will allow us to gain an understanding of gender and sexuality in antiquity and will offer insights into the shaping of our own cultural and personal attitudes. *Same as WGS 242.* *Meyers*

321. Selected Studies in Greek History. (S)
A close examination of a particular period, place or individual in ancient Greek history. Seminar topics include "Alexander the Great" and "5th-century Athens." Prerequisite: CLS/HIS 113. *Same as HIS 321.* *Castor*

322. Selected Studies in Roman History. (S)
A close examination of a particular period, place or individual in ancient Roman history. Seminar topics include "Imperial Women: Power Behind the Throne." Prerequisite: CLS/HIS 114. *Same as HIS 322.* *Castor*

37x. Topics in Greek Art and Archaeology. (A)
A close examination of a particular aspect of ancient Greek sculpture, architecture, or vase painting, or a close study of the archaeological remains from a particular chronological period of ancient Greece. Seminar topics include "Greeks in South Italy." Prerequisite: ART/CLS 115 or permission. *Same as ART 37x.* *Meyers*

37x. Topics in Roman Art and Archaeology. (A)
A close examination of a particular aspect of ancient Roman sculpture, architecture or painting, or a close study of the archaeological remains from a particular chronological period of ancient Rome. Seminar topics include "Art of the Augustan Age." Prerequisite: ART/CLS 117 or permission. *Same as ART 37x.* *Meyers*

381. Plato. (H)
An intensive treatment of some of the major philosophical themes in selected dialogues of Plato. Prerequisite: CLS/PHI 210. *Same as PHI 381.*

GREEK

101. Elementary Ancient Greek I.
Introduction to the grammar and syntax of Classical Greek. *Biles*

102. Elementary Ancient Greek II.
Continues the study of the basic grammar and syntax of Classical Greek. Prerequisite: GRK 101 or placement. *Biles*

201. Introduction to Greek Prose. (LS)
Review of principles of grammar and syntax through composition exercises and introductory readings of authentic Greek prose. Prerequisite: GRK 102 or placement. *Castor*

202. Introduction to Greek Poetry. (H)
Introduction to Greek poetry with emphasis on diction, meter and literary interpretation. Prerequisite: GRK 201 or permission of the instructor. *Biles*

311. Greek Historians.* (H)
An examination of the historical writings of Herodotus and Thucydides with emphasis on translation, interpretation, evaluating scholarship and research. *Biles*

312. Greek Oratory.* (H)
An examination of the Athenian orators Lysias and Demosthenes with emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

314. Greek Lyric Poetry.* (H)
An examination of selected Archaic lyric poets (e.g. Archilochus, Sappho, Alcaeus, Alcman), with emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

315. Greek Comedy.* (H)
An examination of a comedy of Aristophanes with emphasis on translation, interpretation, evaluating scholarship and research. *Biles, O'Bryhim*

316. Greek Tragedy.* (H)
An examination of a tragedy with emphasis on translation, interpretation, evaluating scholarship and research. *Biles*

320. Greek Philosophy.* (H)
An examination of a Platonic dialogue with emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

321. Greek Epic.* (H)
An examination of Homer's Iliad with emphasis on translation, interpretation, evaluating scholarship and research. *Biles*

*Repeatable by permission of department.

LATIN

101. Elementary Latin I.
Introduction to the basic grammar and syntax of Classical Latin. Normally open only to students who have had no prior experience in the formal study of Latin. Offered every Fall. *Biles, O'Bryhim*

102. Elementary Latin II.
Continues and completes the study of the basic grammar and syntax of Classical Latin. Prerequisite: LAT 101 or placement. Offered every Spring. *Biles, Meyers, O'Bryhim*

103. Accelerated Latin.
Intensive study of Latin grammar. This course compresses the material from LAT 101 and 102 into one semester, thus enabling the student to enter LAT 201 after one semester of instruction. Intended for motivated students and for those who have placed into this course after taking Latin in high school. *Staff*

201. Introduction to Latin Prose. (LS)
Introduction to Latin prose incorporating a review of forms and structures. Successful completion of the course signifies that the student has mastered the elements of Latin and is prepared to begin the study of Roman texts. Prerequisite: LAT 102 or placement. Offered every Fall. *Biles, Meyers, O'Bryhim*

202. Introduction to Latin Poetry. (H)
Introduction to Latin poetry with the goal of developing speed and facility in meter and interpretation. Prerequisite: LAT 201 or placement. Offered every Spring. *Biles, O'Bryhim*

311. Latin Historians.* (H)
An examination of the histories of Tacitus with an emphasis on translation, interpretation, evaluating scholarship and research. *Biles, Meyers, O'Bryhim*

312. Latin Oratory.* (H)
An examination of the speeches of Cicero with an emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

313. Latin Epic.* (H)
An examination of selected Latin epics with an emphasis on translation, interpretation, evaluating scholarship and research. *Biles, Meyers, O'Bryhim*

315. Latin Comedy.* (H)
An examination of the comedies of Plautus with an emphasis on translation, interpretation, evaluating scholarship and research. *O'Bryhim*

316. Latin Tragedy.* (H)
An examination of the tragedies of Seneca with an emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

318. Latin Satire.* (H)
An examination of the satires of Horace, Persius and Juvenal with an emphasis on translation, interpretation, evaluating scholarship and research. *Biles*

319. Latin Letters.* (H)
An examination of the letters of Cicero, Pliny and Fronto with an emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

320. Latin Philosophy.* (H)
An examination of the philosophical works of Cicero with an emphasis on translation, interpretation, evaluating scholarship and research. *Staff*

*Repeatable by permission of department.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Archaeology of Pompeii.
The Ancient Family.

COMPARATIVE LITERARY STUDIES

Professor Jon Stone, Chair

MEMBERS OF THE COMPARATIVE LITERARY STUDIES PROGRAM COMMITTEE

Scott Lerner	*Arthur and Katherine Shadek Professor of Humanities and French and Italian*
Zachary Biles	*Professor of Classics*
Giovanna Faleschini Lerner	*Professor of Italian*
Lisa Gasbarrone	*Professor of French*
Richard Kent	*Professor of Art History*
Jon Stone	*Professor of Russian and Russian Studies*
Linda Aleci	*Associate Professor of Art History*
Rachel Anderson-Rabern	*Associate Professor of Theatre*
Peter Jaros	*Associate Professor of English*
Carrie Landfried	*Associate Professor of French and Francophone Studies*
Meagan Tripp	*Assistant Professor of German*

Additional faculty not on the program committee also contribute to this program.

The minor in Comparative Literary Studies investigates the development of literature in an international and historical context. In this program, students study foundational works of literature from a variety of historical periods and national traditions in order to understand the diverse ways in which literary processes unfold in different social milieus and the interrelationships among different literary traditions. The study of genres, periods and themes across diverse cultures promotes "liberal education" in its truest sense, by enabling students to see beyond the parochial constraints of any single literary tradition.

Since antiquity, humanity has produced literary documents that serve as a repository of knowledge and wisdom, offering us the opportunity to reflect on the human experience. In addition to inspiring, literature enables us to see the ways in which other cultures are like our own, since we can discern in their literatures basic commonalities of form and theme that ground and sustain all peoples from otherwise diverse cultural, aesthetic and linguistic backgrounds.

The study of literary works offers a rich field of study for scholars from a broad range of academic disciplines. Because literature has always served as both outlet and inspiration for artists, historians (and makers of history), social thinkers and musicians, understanding literature prepares students in the humanities, social sciences and natural sciences to participate actively in the global exchange of ideas.

A minor in Comparative Literary Studies consists of six courses. One of these is the required core course, LIT 101 Introduction to Comparative Literary Studies. The other five are electives; at least two of these must be at the 200 level or higher.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

101. Literatures of the World:
Introduction to Comparative Literary Studies. (H)
Study of literature as a common human enterprise from ancient times to the present day, across linguistic and national boundaries. Development of vocabulary and concepts for the analysis of literary genres, themes and historical periods of literary development. Focus on literary texts from various eras, cultures and languages. Readings will be in English. *Staff*

220. The World of the Novel. (H)
Since the time of its rise as a cultural force in the eighteenth century, the novel has changed our sense of reality and ourselves. It became a form that has reshaped the literary universe. Readings in this course will include works by Jane Austen, Gustave Flaubert, Fedor Dostoevsky, Franz Kafka, Willa Cather, and Vladimir Nabokov. *Staff*

315. Introduction to Literary Theory. (H)
This course focuses on the big ideas that animate literary criticism, from sexuality to the unconscious, race to colonialism, signification to deconstruction. We study questions such as: What is subjectivity? How do words get their meaning? Where does gender come from? Our goal is to see literary texts, but also the world around us, in new and challenging ways. Students enrolling in this course should have taken at least one college-level literature course. *Same as ENG 315.* *Staff*

APPROVED COURSES FOR ELECTIVES

The courses listed below have been approved as Comparative Literary Studies electives. Other courses, such as topics courses, may be approved by Jon Stone, chair of Comparative Literary Studies. Students should be aware that some of these courses have prerequisites.

LIT 110. Global Theatre Perspectives. *Same as TND 110.*

LIT 162. Life and Times of German Fairy Tales. *Same as GST 162.*

LIT 182. Tolkien's Mythology. *Same as ENG 182.*

LIT 211. The Bible as Literature. *Same as ENG 211.*

LIT 214. Russian Novel from Pushkin to Tolstoy (19th Century). *Same as RUS 214.*

LIT 215. Magic and Mayhem in French Fairy Tales. *Same as FRN 215.*

LIT 218. Narrative Journeys in Arabic Literature. *Same as ARB/AFS 218.*

LIT 230. Classical Myth. *Same as CLS 230.*

LIT 231. Ancient Laughter. *Same as CLS 231.*

LIT 233. Religion in 20th Century Jewish Literature. *Same as JST/RST 233.*

LIT 253. Epic and Romance. *Same as ENG 253.*

LIT 255. African Literature. *Same as AFS/ENG 255.*

LIT 315. Latin Comedy. *Same as CLS 315.*

LIT 352. Madonnas, Mothers, and Virgins: Medieval Religious Women. *Same as ENG 352.*

LIT 354. L'étranger. *Same as FRN 354.*

LIT 359. La France Occupée. *Same as FRN 359.*

LIT 363. Reading Characters in the Atlantic World. *Same as ENG 363.*

RST 112. Judaism. *Same as JST 112.*

RUS 217. Russia: The 20th Century in Print and Film.

2022-2023 APPROVED ELECTIVES

LIT 110. Global Theatre Perspectives.

LIT 182. Tolkein's Mythology.

LIT 203. Medieval British Literature.

LIT 255. African Literature.

LIT 279. The Qur'an.

LIT 352. Madonnas, Mothers, and Virgins.

LIT 363. Reading Characters in the Atlantic World.

LIT 376. Song Cycles and Concept Albums.

COMPUTER SCIENCE

Professor Edmund Novak, Chair

Jing Hu	*Associate Professor of Computer Science*
Justin Brody	*Assistant Professor of Computer Science*
Bradley McDanel	*Assistant Professor of Computer Science*
Edmund Novak	*Assistant Professor of Computer Science*
Jason Wilson	*Assistant Professor of Computer Science*
Anthony Weaver	*Research Computing Programmer & Systems Administrator and Senior Adjunct Instructor of Computer Science*

The study of computer science includes, but is not limited to, computer programming. We learn how to solve problems by creating, implementing, and analyzing algorithms, and study how computers are organized, how they carry out their operations, how they store and transmit information, and how we control and interact with them.

Computer science has rich overlaps with a wide variety of fields, in terms of both shared skills and paradigms and interdisciplinary synergies, with particularly clear connections to mathematics, natural and physical sciences, philosophy, psychology, and the language arts. The computer is now deeply embedded in our culture and society, which means that its use and abuse are cultural and social concerns.

A major in Computer Science consists of eleven computer science courses together with a mathematics requirement. The major includes seven required computer science courses: CPS 111, 112, 222, 237, 242, 261 and 337, as well as four electives. Three of the electives must be Computer Science courses at the 300-level or above that are not cross-listed, other than CPS 390 and 490. One of the electives may be any Computer Science course at the 200-level or above or may be chosen from PHI 244, PSY/SPM 305, PSY/SPM 312 or an otherwise related course outside of computer science, approved by the chairperson. Required mathematics courses are: MAT 109, 110 and either 216 or 229.

A minor in Computer Science consists of six courses: CPS 111 and 112, and four other CPS courses, including at least one at the 300-level that is not cross-listed with another department or discipline.

A maximum of four courses taken at other institutions may count toward the Computer Science requirements of the major, and of these, at most one may count toward the 300-level elective requirement. At most two courses taken at other institutions may count toward the minor.

Opportunities exist for students to design a joint or special studies major in Bioinformatics in consultation with the Biology and Computer Science chairs.

Computer Science students have studied abroad in the following programs in recent years: Institute for Study Abroad at Butler University Programs in England, Ireland, Scotland, Australia and New Zealand. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

111. Computer Science I.
Introduces basic concepts in computer science and computational problem solving through the design of algorithms and computational processes, modularization, and abstraction. Also introduces the processes of programming and software development as a means to put solutions into practice. Has a required lab, but does not satisfy the "Natural Science with Laboratory" requirement. *Hu, McDanel, Novak*

112. Computer Science II.
A second course in computer science and computational thinking, focusing on data structures and advanced programming. Topics include implementation and applications of data structures such as stacks, queues, linked lists, trees and graphs. Also introduces performance analysis of algorithms. Has a required lab, but does not satisfy the "Natural Science with Laboratory" requirement. Prerequisite: CPS 111 or permission of the instructor. *Brody, Wilson*

222. Computer Science III.
This course will prepare students for advanced computer science courses. Using a production-level programming language as a tool, students will implement advanced data structures and algorithms. Students will also study advanced programming concepts and strategies for algorithm development and analysis. Through programming projects, students will explore complex tree structures, graph algorithms, greedy algorithms, dynamic programming, divide-and-conquer algorithms, and parallelism/concurrency. Prerequisite: CPS 112 and MAT 109. Offered every Fall. *Novak*

237. Discrete Mathematics.
Basic set theory, basic proof techniques, combinatorics (the theory of counting), and graph theory with related algorithms. Prerequisite: MAT 109. Same as MAT 237. Offered every Fall. *Novak*

242. Computer Organization.
This course covers the basic instruction set, architecture, and organization of a modern computer. Fundamentals of translating higher-level languages into assembly language, and interpretation of machine languages by hardware are studied. A model of computer hardware organization is developed from the gate level upward. Topics include logic circuits, micro-architectures and microprogramming, machine architectures, and software-hardware interface issues. Prerequisite: CPS 112. *McDanel*

261. Algorithms.
Trees, graphs and networks; further analysis of algorithms and their efficiency. Prerequisite: CPS 112 and CPS/MAT 237. *Hu*

270–279. Topics in Computer Science.
Intermediate level courses.

291. Directed Reading.
Reading directed by the Computer Science staff. Permission of chairperson.

337. Theoretical Foundations of Computer Science.
An introduction to the theoretical models used to understand the capabilities and fundamental limitations of computational devices. Topics include formal languages, automata, grammars, computability, reductions, and complexity. Prerequisites: CPS 112 and CPS/MAT 237. *Brody*

338. Computational Mathematics.
Numerical analysis as implemented on computers. Polynomial and rational approximations, numerical differentiation and integration, systems of linear equations, matrix inversion, eigenvalues, first and second order differential equations. Prerequisites: CPS 111 and MAT 229. *Same as MAT 338.* *Staff*

340. Mobile Application Development.
This course will introduce you to writing applications for the Android platform. The purpose of this course is not to narrowly teach proficiency of Android "App" development, but rather to teach proficiency in learning how to develop applications on a platform that is new to you. Mobile applications on Android will merely serve as a vehicle to achieve this. Throughout the course we will strive to achieve several goals: (a) refine your programming skills in general by solving practical problems that are apt for a mobile platform like Android, (b) learn the fundamentals of Android application development (c) refine your knowledge of the java programming language, and (d) prepare you for the job market after graduation. Prerequisite: CPS222. *Novak*

360. Introduction to Machine Learning.
This course will introduce some foundational machine learning algorithms from both a theoretical and practical perspective, with the focus on developing a deep understanding of a few important algorithms. This deep exploration will expose some of the principles and challenges that lie at the core of nearly all machine learning techniques. The study of machine learning requires the use of mathematical, computational, and empirical tools and students will gain experience bringing all of these tools to bear to understand, apply, and perhaps even improve upon the methods discussed. Prerequisites: CPS 222 and MAT 216. *Hu*

363. Introduction to Bioinformatics.
An introduction to the field of bioinformatics, addressing some of the important biology and computer science concepts related to it, with a focus on the computational aspects. Topics include a molecular biology primer, biological sequence alignments and analysis, gene mutation patterns, phylogenetic tree and construction algorithms, protein structures and functions, proteomics, application of basic machine learning algorithms, and other commonly used bioinformatics tools and resources. Prerequisites: CPS 222 or CPS 261. *Hu*

367. Artificial Intelligence.
An introduction to some of the core problems and key ideas in the field of artificial intelligence from a computational perspective. The course will focus on exploring various representational and algorithmic approaches to the problem of creating artificial agents that know things, can reason about the world, and that make good decisions. Key topics: heuristic search, adversarial search, reinforcement learning, constraint satisfaction, logical inference, probabilistic inference. Prerequisites: CPS 222 and CPS/MAT 237. Corequisite: MAT 216. *Wilson*

370–379. Topics in Computer Science.
Study of specialized areas of Computer Science.

390. Independent Study.
Independent study directed by Computer Science staff. Permission of chairperson.

391. Directed Reading.
Reading directed by the Computer Science staff. Permission of chairperson.

490. Independent Study.
Independent study directed by Computer Science staff. Permission of chairperson.

491. Directed Reading.
Reading directed by the Computer Science staff. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

CPS 173. Introduction to Computer Programming.
CPS 376. Parallel Computing.

EARTH AND ENVIRONMENT

Professor Robert C. Walter, Chair

Dorothy J. Merritts	*Harry W. & Mary B. Huffnagle Professor of Geosciences*
Andrew P. de Wet	*Professor of Geosciences*
Zeshan Ismat	*Professor of Geosciences*
James E. Strick (on leave Fall 2022)	*Professor of Science, Technology and Society*
Robert C. Walter	*Professor of Geosciences*
Christopher J. Williams	*Professor of Environmental Science*
Eve Z. Bratman	*Associate Professor of Environmental Studies*
Elizabeth M. De Santo	*Associate Professor of Environmental Studies*
Eric Hirsch (on leave Fall 2022)	*Assistant Professor of Environmental Studies*
Timothy D. Bechtel	*Director of F&M Science Outreach and Senior Teaching Professor of Geosciences*

Our home the Earth is a complex, dynamic system. It changes from day to day and from year to year, from one ice age to the next and from eon to eon, in many different ways. Some changes are cyclical, others are quite unpredictable. We need to understand these processes, especially as they are increasingly affected by human action. They influence our habitat, to which we must continually adapt. They control the treasury of resources, rich but finite, on which we rely.

Study of the Earth draws on all traditional disciplines. Geoscientists interpret field observations and lab data using principles of chemistry, physics and concepts unique to geology. They link processes that operate within and at the surface of the Earth. Environmental scientists focus on the impact of human action, on ways in which Earth systems respond when they are disrupted. These scientists evaluate and solve a wide range of technological problems. Environmental managers and policy-makers address the same issues in their cultural, economic and political contexts. As we learn how the Earth works, we must develop the means and the political will to manage it appropriately.

At Franklin & Marshall, three majors are available to students who wish to explore these concerns: Geosciences, Environmental Sciences and Environmental Studies. Each major has its own core of introductory courses, but there is sufficient overlap among them so that students can embark on this field without immediately choosing one major or another. Later, students take more specialized courses in geosciences, mid-level courses in several sciences, or courses in environmental policy and its cultural, historical context. Each major program includes advanced courses, opportunities to engage in research with members of the faculty and an integrative capstone course. Many opportunities and significant financial support are available for students to study in the field, in their courses, on extracurricular field trips, through a variety of research programs and while studying abroad.

The scope of opportunities open to graduates of this program is very broad. Many own or are employed by businesses engaged in environmental consulting, management of water resources, environmental law and the energy industry (renewables, oil, gas and coal). Others are teaching in high schools, colleges and universities, or working in various branches of the federal

government. But, this is a liberal arts program. It has served as a good launching pad for systems analysts and financiers, for veterinarians, writers and realtors and for at least one composer of classical music.

A major in Geosciences consists of 12 courses: ENE 110 or 114 or 118, followed by ENE 221, 226, 231, 321, 324, 353, and 480. ENE 353 can be taken during the summer after the sophomore or junior year. Students select one additional course above the 100-level from the Geosciences offerings. Students are also required to take the following cognate courses: CHM 111, MAT 109, and PHY 111. Students planning to pursue graduate studies or professional employment in geosciences should take as many courses as possible from the following: MAT 110, 111 and 229; PHY 112; and CHM 112. The writing requirement in the Geosciences major is met by the completion of ENE 480.

A minor in Geosciences consists of six courses, including one course selected from ENE 110 or 114 or 118, followed by ENE 221 and four Geosciences courses at the 200, 300 or 400 level selected in consultation with the department chair. A minor should focus upon a particular area of the geosciences such as surficial processes, paleobiology, geophysics, tectonics, petrology/geochemistry. No more than three courses from the student's major can also count towards the Geosciences minor.

A major in Environmental Science consists of 15 courses: ten core science courses from the Departments of Biology, Chemistry and ENE, including 2 courses from one department, 3 courses from the second department, and 5 courses from the third department, plus two quantitative and/or field skills courses, two environment and society courses and one upper-level integrative seminar. The writing requirement in the Environmental Science major is met by completion of ENE 454.

The specific requirements for the Environmental Science major are: In ENE, the first two courses are ENE 110 or ENE 114 or ENE 118 plus ENE 221 or ENE 226, the third course selected from ENE 324 or ENE 344, additional courses selected from upper level ENE science laboratory courses. In Biology, the first course is BIO 101 with the second or third course selected from an upper level biology course (e.g., BIO 323, and/or other approved courses). However, a student who plans to complete 5 courses in the Biology component of the major should complete BIO 101, BIO 102, BIO 200 and two additional upper level biology courses. In Chemistry, the first two courses are CHM 111 and CHM 112, the third chemistry course selected from CHM 211, 221 or 222; additional courses selected from upper level chemistry courses. No more than one 390/490 course can count towards the core science requirement. ENE 117 and ENE 454. The second course in the environment and society category selected from ENE 216, AMS 280 and 401, ENG/ ENE 260, BOS/ENE 335, ECO/ENE 240 or another approved course. Two quantitative or field skills courses are required. The first quantitative/field skill course selected from ENE 250, BIO 210, or ENE 353 or another approved quantitative or field course. The second quantitative/field skills course can be selected from ENE 250, BIO 210, ENE 35

There is no minor in Environmental Science.

Faculty affiliated with the Environmental Science curriculum include: Professors Hess, Plass, and Morford (Chemistry); Professors Ardia, Sipe, Fischer, Fields, Olson, and Gotsch (Biology).

A major in Environmental Studies consists of 15 courses, 11 courses in the core program, a research methods class and three electives. The required core courses fall within three categories, Environment, Natural Environment, and Human Environment. The required Environment core courses are: ENE 117, 216 and 454. The required Natural Environment core courses are: BIO 101 and ENE 114 or ENE 118, plus one course from the following group: ENE 226, 344, 350; ENE 221; ENE/BIO 257; BIO 323, 340, 342. The required Human Environment core courses are ECO 100 or ECO 103, plus one course from the following group: ANT 100, GOV 100, and SOC 100; three courses selected from AMS 280, ANT 234, ANT 272, ENG 258, ENG 260, ENG 376/362, ANT 272, BOS 335, ART 366, ECO 240, ENE 312 or 318, ENE 314 and ENE 320. The research/quantitative methods course may be selected from BIO 210, BOS 250, ECO 210, ENE 250, MAT 116 or MAT 216, and PSY 230. Three electives may be selected from AMS 300, 420; ANT 257; BIO 245, 360; BOS 480; ENE 250, 313, 315, 352, 361, 405; GOV 305; NSP 295; and ENE 490 (independent study). Core courses in addition to those taken to meet core requirements may be taken as electives, but the major must include at least three courses at or above the 300 level. The writing requirement in the Environmental Studies major is met by completion of ENE 454.

A minor in Environmental Studies consists of six courses, including ENE/STS 117; two courses in environmental policy/ human environment (ENE 216 plus one additional course selected from ECO/ENE 240, AMS/ENE 280 or 401, STS/ENE 312, ENE 314 and topics courses approved by the Environmental Studies Committee); two laboratory courses (BIO 101 or ENE 114 or ENE 118 and one of the following: BIO 323, 325, 340; ENE 221; ENE/BIO 257; ENE 226, 250, 350; and approved topics courses); and one additional environmental studies elective at the 300 or 400 level, or ENE 490. Some of these courses have prerequisites (see relevant departmental listings). No more than three courses from the student's major can also count towards the Environmental Studies minor

Faculty affiliated with the Environmental Studies curriculum include: Professors Anderson and Mueller (English); Professor Fleming (Economics); Professors Reitan and Shelton (History); Professor Kurland (Business, Organizations, and Society); Professors Merritts, Strick, De Santo, Hirsch, and Bratman (Earth and Environment); Professors Ardia and Sipe (Biology).

To be considered for honors in any of the department's three majors, students must meet the College's general requirements for honors. These include a significant body of excellent coursework in the department's curriculum; no minimum grade point average is specified.

Off Campus Study: Earth and Environment majors have studied abroad in several programs in recent years, including: School for Field Studies (SFS): Costa Rica, Australia, Kenya; University of Copenhagen, Denmark; School for International Training (SIT): Tanzania; Semester in Environmental Science,

Woods Hole, Mass.; Sea Education Association, Sea Semester, Woods Hole; Butler University Programs in Edinburgh and Glasgow, Scotland. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

GEOSCIENCES

110. The Dynamic Earth. (N)
From stardust to us, this course explores the evidence for the birth and 4.6 billion-year evolution of our unusual planet. Evidence preserved in rocks and other Earth materials record the passing of time, marking critical events in Earth's history such as the first appearance of water, oxygen, and life itself. In addition, Earth provides raw materials used to advance societies, from the primitive stone tools of our ancient ancestors to the rare elements needed for modern electronics, but extraction of many resources that drive modern society comes at a cost. Students will explore the unyielding forces of earth across deep time, while examining the fragility of Earth and how humans have disrupted components of this system. In order to care for and protect our planet, we must understand it, and learn how it works. Field trips enable first-hand observations of Earth's physical, chemical, and biological processes, and how they relate to contemporary events on our planet, such as floods, landslides, earthquakes, volcanic eruptions, and climate change. Field Trips. *Walter*

114. Earth, Environment and Humanity. (N) (NSP)
Look at the news or your social media feeds. You are seeing unprecedented heat waves, floods, droughts, earthquakes, landslides, sinkholes, erosion, pollution, extinctions, human conflicts over resources, demonstrations and calls for environmental and social justice. All of these are influenced, if not directly driven, by earth systems and cycles. From this course, you will learn how these systems and cycles work and interact, how humans have altered many of them, the consequences of these alterations, and what you can do about it. Laboratories and field trips will focus on methods for understanding, characterizing, and forecasting natural phenomena, and how we generate and manage energy, natural resources, water, waste and all of the necessities and by-products of human civilization. Field trips.
Bechtel, de Wet, Williams

118. Introduction to Oceanography. (N)
World's oceans and our interactions with them. Origin of ocean basins and seawater. Origin of submarine topographic features and sediments. Ocean floor spreading and plate tectonics. Origin, distribution and influence of ocean currents. Coastal processes and coastlines. Marine ecosystems. Biological, energy and mineral resources of the oceans. *Staff*

221. History of the Earth. (N)
Geologic time, principles of historical geology. Physical evolution of the Earth. Patterns of change in continents and oceans; reconstruction of ancient environments. Origin and evolution of life; its influence on the oceans, the atmosphere and the Earth's crust. Field trips. Prerequisite: ENE 110 or 114 or 118.(not offered in Fall 2022 or Spring 2023)
C. de Wet and A. de Wet

226. Surface of the Earth. (N)
This course examines how Earth's surface is shaped and changes with time as a result of interactions among climate, geologic materials, tectonics, and human activity. Topics explored through field trips and lab work include streams, floods, landslides, soils and agriculture, glaciers and glacier melting, and the ways in which landscapes can be protected, restored, and managed. Geographic Information Systems are used to explore landscapes worldwide, including Antarctica, China, the American West, among other locales Prerequisite: ENE 110 or 114 or 118. *Merritts*

231. Structural Geology. (N)
In this course, we study the geometry and formation of rock structures, the material behavior of rocks and its relationship to natural disasters. We focus on mountains – they are composed of almost every tectonic feature studied in geology and hold clues to the earth's crustal evolution. The complex relationship between mountains and climate change is discussed. We ask why most of the world's natural resources, such as fresh water, originate in mountains and explore their relationship to resource inequity. Laboratory exercises include field trips in the Appalachian Mountains, analog modeling and theoretical modeling. Prerequisite: ENE 110 or 114 or 118. *Ismat*

250. Environmental Resources and Geographic Information Systems. (N)
Introduction to methods of analysis of contemporary environmental issues that rely on use of Geographic Information Systems (GIS) for assessment, understanding and solutions. GIS uses a variety of types of digital data, including remote sensing imagery, to generate computer maps of topography, land use, vegetation cover, soil type and resources for areas as small as Baker Campus and as large as the Amazon Basin.
A. de Wet

257. Conservation Paleobiology. (N)
Data from fossil, archaeological, and contemporary records can inform our understanding of how species responded to past environmental changes and their potential responses in the future. Topics include extinction risk, shifting baselines, the (in)completeness of geohistorical records, environmental proxies, and the Anthropocene. Prerequisite: ENE 114, ENE 110, or ENE 118, or BIO 110. *Same as BIO 257.* (not offered in Fall 2021 or Spring 2022) *Staff*

321. Mineralogy. (N)
Crystallography and crystal chemistry; physical and chemical properties, stability and occurrence of common minerals, with emphasis on the common rock-forming silicates. Laboratory studies include crystal symmetry, mineral examination in hand-specimen; introduction to the polarizing microscope. Prerequisite: CHM 111. (not offered in Fall 2021 or Spring 2022) *Mertzman*

322. Igneous and Metamorphic Petrology. (N)
Origin, occurrence and interpretation of igneous and metamorphic rocks; interpretation and application of experimental phase equilibria and elementary thermodynamics. Laboratory: examination and interpretation of igneous and metamorphic rocks, textures and mineral assemblages in hand-specimen and thin-section. Prerequisite: ENE 321. (not offered in Fall 2021 or Spring 2022) *Mertzman*

324. Sedimentary Systems: Archives of Changing Climates and Environments. (N)
Sedimentary rocks preserve Earth's past environments, archiving paleoclimate, paleoecology, and ancient depositional systems, providing a record of changing conditions across deep time. Field trips and laboratory study, including analytical techniques and microscopy, will allow students to read and understand this archive to inform future decision-making as Earth transitions into a warmer climate regime, with associated implications for humanity and natural systems. Prerequisite: ENE 221.
C. de Wet

344. Global Change/Natural Resources. (N)
The Earth and life on it are being altered by humanity at an unprecedented rate. In this course we will study scientific evidence that tells us how Earth has changed in the geologic and historic record. We will investigate the evidence for contemporary climate change and its impacts on humanity. We will study Earth's climate system and the physical and biological feedbacks that play an important role in climate change. Laboratory exercises will focus on methods used to understand present climates and to reconstruct past climates. We will also evaluate methods of quantifying carbon cycling and sequestration. Finally we will evaluate the ways that humanity might mitigate climate change. Prerequisites: ENE 114 or ENE 118 or BIO 101/110. Offered every Spring. *Williams*

350. Landscape Geochemistry. (N)
Introduction to the theory, practice, and application of geochemistry to Earth's surface: Emphases will be placed on understanding the interplay among Earth systems that influence climate and weathering, and the impacts these processes have on soil formation (the Critical Zone). Students will learn to: (a) conduct field research, (b) collect, process, and analyze samples by a variety of analytical methods, and (c) interpret data. Students will think critically by conducting meaningful research that is relevant to real scientific questions. *Walter*

353. Summer Field Course.
Lithologic, stratigraphic and structural geologic examination of classical areas; preparation of reports and geologic maps on topographic and aerial photographic base maps in areas of sedimentary, metamorphic and igneous rocks; examination of mineral localities. Approved courses are offered by other institutions and accepted for credit with grade. The grade earned in this course will count in Franklin & Marshall GPA calculations, regardless of whether it is being taken as a required course for a major or minor or not. May be taken for one or two course credits. Prerequisite: permission of department chair. *Staff*

384. Changing Views of the Earth, 1650–1850. (S)
A Very Wreck of a World: speculative cosmologies, descriptive natural history and the origins of a science of the Earth. The age of the Earth and our "Place in Nature": a fall from grace, limitless horizons and the Victorian commitment to progress. National and social origins of the science and scientists. Relation of new geological concepts to the Industrial Revolution and contemporary cultural themes, including their expression in the arts. Prerequisite: permission of instructor. *Same as STS 384*. *Staff*

433. Paleontology. (N)
The nature of fossils. Analysis of growth and variation in fossil assemblages. Systematic methods. Reconstruction of the modes of life of extinct organisms. Paleoecology, paleobiogeography and biostratigraphy. Fossil record of evolutionary patterns and inferred processes in the history of life. Laboratory, field trips. Prerequisite: ENE 221 or permission of instructor. *Staff*

438. Tectonics.
Global tectonics: seismological, geothermal, geomagnetic and geochronological evidence of crustal and mantle history and processes; mantle bulk properties and convection; plate tectonics; sea floor spreading; application of plate tectonics to continental masses; tectonic models. Prerequisite: ENE 231. *Ismat*

480. Geosciences Senior Seminar.
The purpose of this capstone course for the geosciences major is for students to demonstrate a comprehensive knowledge of key geological concepts and processes, to explore the classic literature in the discipline, and to synthesize this knowledge using an Earth systems approach. This will be done via presentations, discussion, and field trips. Prerequisite: senior standing in Geosciences. *Walter*

490. Independent Study.
ENE 490's are a one or two semester-long research collaboration between a student and a faculty member. Each project involves a research question or scholarly problem where the student will hone skills such as understanding primary literature, collecting and interpreting data, and professional presentation of their work. Students will likely give oral or poster presentations at the spring F&M Research Fair and/or at professional meetings. A written document is expected at the conclusion of the 490. Students who would like to do a 490 should speak with ENE faculty in the area(s) that they are interested in pursuing. Each semester 490 is one course credit. Permission of the faculty member and Department Chair is required and registration for 490's occurs right away in the beginning of each semester. Departmental Honors is usually based on a two semester 490. Permission of chairperson.

ENVIRONMENTAL STUDIES/SCIENCE

114. Earth, Environment and Humanity. (N) (NSP)
Investigation of the Earth with emphasis on opportunities and constraints on human activities arising from its properties. Structure and processes of the Earth; natural hazards; the role of humans in changing the face of the Earth; surface and ground water use and management; formation and degradation of soils; energy resources; human wastes. Laboratories focus on principles involved in local, national and global environmental problems and their resolution. Field trips. *Bechtel, de Wet, Williams*

117. The Environment and Human Values. (S)
Study of historical and modern attitudes toward nature; human use of nature's resources; effects of the growth of science and technology on human uses of and attitudes toward the environment; and the ability of modern humans to substantially alter the environment (e.g., by altering global temperature). Key concepts: human population growth; the notion of "limits to growth"; and the difficulty of managing the use of common pool resources. *Same as STS 117*. *Bratman, Hirsch, Strick*

140. Climate Crisis, Human Health, and Justice. (NSP)
Unprecedented heatwaves, flooding, wildfires, tornadoes, cyclones, droughts, insect populations, deforestation, extinction, ice loss, sea level rise... Climate change has come so far, and has reached a level of acceleration, that catastrophic consequences that were once predicted by the end of the century are now expected in the next decade or two. This course will examine the climate crisis not as a threat to nature, but as a threat to human health and well being -- particularly among populations in vulnerable regions that have high exposure and vulnerability, and low resilience capacity. Same as AFS/NSP/PBH/STS 140. *Bechtel*

141. Materials and Humanity. (NSP)
Diamond, gold, copper, glass, iron, and clay: Materials like these have played a key role in the success of the human enterprise from the Paleolithic to present. This course will explore the properties and utilization of different materials that have influenced human history and underpin modern society. Through reading, writing, and some hands-on experimentation, we'll research different materials to understand how humans have used science to characterize and exploit material properties to innovate and advance technology and society. This course carries the NSP (Natural Science in Perspective) designation. *Williams*

216. Environmental Policy. (S)
Surveys how federal, state and local regulations seek to protect human health and the environment. Introduces frameworks for managing wastes and protecting air quality, water quality and habitats. Reviews policy tools, including economic incentives, penalties and legal obligations. Reviews policy evaluation, focusing on federal statutes, the legislative process that creates them, the role of the judiciary and the success of environmental law in changing practices. Prerequisite: ENE/STS 117 or GOV 100. Offered every semester. *Same as STS 216*. *De Santo*

218. Political Ecology of Agriculture and Food. (S)
How do human dynamics of power and influence inter-relate with land, natural resources, social structures, and environmental systems? This course introduces students to the field which tackles this question, known as political ecology. It engages themes and debates concerning food production in rural and urban contexts, as well as food consumption. Through studying food systems, we are able to witness and analyze how labor, land uses, biotechnology, food sovereignty, food regulations, and food waste are all indelibly shaped by the interplay of economics, politics, social relationships, and human relationships with the Earth. Same as PUB 218. *Bratman*

220. Sustainable Design. (A)
This course is a combination of examining the principles of sustainable/green architectural design and executing design solutions for projects, incorporating the sustainable design principles. The course includes an introduction to architectural drawing/drafting and model making as well as basic principles of architectural design, in order to effectively execute the design solutions. *Same as ART 220*. *Hickey*

226. Surface of the Earth. (N)
Study of landform development. Roles of surficial processes controlled by climate and tectonics, rock characteristics and time. Special emphasis on mass wastage, surface and ground water, glaciation, wind and coastal processes in landscape development. Terrain analysis using topographic maps and aerial photographs; field trips. Relationship to environmental problems. Prerequisite: ENE 110 or 114 or 118. *Merritts*

240. Environmental and Natural Resource Economics. (S)
A survey of environmental and natural resource issues in economic theory and policy. History of the environmental movement and environmental debates; theory of natural resource allocation, natural resource issues; theory of environmental management—for example, externalities, public goods and common property. Topics covered will include pollution, resource depletion and global climate change. Prerequisites: ECO 100 and 103, or permission of the instructor. *Same as ECO 240*. *Fleming*

244. Indigenous Environmental Justice. (NW)
Examination of the way indigenous identity, human rights, and development intersect with the struggle for environmental justice around the world. Analysis of how each term in this course's title is open to legal fixing, activist redefinition, and diverse projects that render the environment something political. Considers distinct case studies drawn from several continents to show that some see being indigenous today as politically potent, while others take this category to be excessively vague or, even, invented; by focusing on ordinary lives and extraordinary struggles, we explore the wide variety of relationships to territory that "indigenous" encapsulates. *Same as STS244*. *Hirsch*

245. American Nature Essays.
An exploration of the themes, structures, styles and significance of American nature essays. The purposes of the course are to become familiar with nature essays as a distinctive form of interdisciplinary literature, to see the natural world and our place in it through the voices and visions of the best nature essayists, and to develop the arts of perception, reflection and compelling writing. The course includes weekly field trips and workshops in addition to class discussions of essays by more than 20 writers. Prerequisites: BIO 110, ENE 114 or ENE 117 or ENE 118 and permission of the instructor. *Same as BIO 245*. *Sipe*

250. Environmental Resources and Geographic Information Systems. (N)
Introduction to methods of analysis of contemporary environmental issues that rely on use of Geographic Information Systems (GIS) for assessment, understanding and solutions. GIS uses a variety of types of digital data, including remote sensing imagery, to generate computer maps of topography, land use, vegetation cover, soil type and resources for areas as small as Baker Campus and as large as the Amazon Basin. *A. de Wet*

257. Conservation Paleobiology. (N)
Data from fossil, archaeological, and contemporary records can inform our understanding of how species responded to past environmental changes and their potential responses in the future. Topics include extinction risk, shifting baselines, the (in)completeness of geohistorical records, environmental proxies, and the Anthropocene. Prerequisite: ENE 114, ENE 110, ENE 118, or BIO 110. *Same as BIO 257*. (not offered in Fall 2021 or Spring 2022) *Staff*

258. Contemporary Science Writing. (H)
In this course, we will examine texts ranging from popular science to science fiction, by scientists and nonscientists alike. As readers, we will be interested in the ways people write about science, and, as writers, we will try to put some of these principles into practice. We will be equally interested in the ethical, social, and philosophical questions that contemporary science raises, and in how to probe these questions in writing. *Same as ENG/STS 258*. *Anderson*

260. Nature and Literature. (H)
Readings from a variety of traditions, periods, disciplines and genres to discover diverse assumptions about nature and humanity's relation to it. Readings from both Western and non-Western cultures, though with emphasis on the British and Euro-American traditions. Such broad exploration across vast divides of time and culture should not only teach us about varied understandings of nature but also encourage self-consciousness as we form our own conceptions of what nature is and how we ought best to interact with and in it. *Same as ENG 260*. *Mueller*

312. Environmental History. (S)
Examination of various approaches to environmental and ecological history. Focuses on ways in which the physical and biological world have affected human history and on ways in which human social and political organization, economic activities, cultural values and scientific theories have shaped our alteration and conservation of nature. Selected case studies from environmental and ecological history, with emphasis on the 17th through the 20th centuries. *Same as STS 312*. *Strick*

313. Nuclear Power, Weapons and Waste Disposal. (NSP) (S)
Development of nuclear technology, beginning with the atomic bomb efforts of WW II. The course deals first with the technology itself, as well as with the ways in which it was embedded in and drove American and international politics, including the arms race and the Cold War. Includes postwar development of civilian nuclear power reactors, creation of the Atomic Energy Commission and the national debate over nuclear power and waste disposal methods. *Same as STS 313*. *Strick*

314. Global Environmental Politics. (S) (WP)
Analysis of environmental problem definition and policy solutions in different countries, with particular focus on the developing world. Effects of political drivers of air and water pollution, land cover change, and biodiversity conservation. Influence of political structures, power relations, cultural values, ecological dynamics, and social interactions on environmental politics. Roles of national and multilateral institutions, NGOs, and civil society in policy debates. Outcomes of multi-stakeholder negotiations over environmental governance of global commons, including North-South disputes. Counts as Human Environment core course for Environmental Studies. Prerequisite: ENE 216 or permission of instructor. *Same as GOV 374*. *Bratman, De Santo*

315. Health Risks in the Environment.
Known and emerging environmental hazards represent significant public health risks to vulnerable populations. Case studies include lead, tobacco, asthma, nutrition, and endocrine-disrupting compounds as well as common airborne and waterborne chemical and biological pollutants. The course develops an understanding of acute, chronic and cumulative health risks that result from short-term and long-term environmental exposures. Important epidemiological, demographic and environmental justice parameters are incorporated into students' projects that focus on at-risk groups, such as children, the elderly and immuno-compromised individuals. *Same as STS 315*. *Everett*

317. Resources, Borders, and Globalization. (NW) (S) (WP)
This course follows natural resources of food, water, land, air, and others across borders and around the world in order to understand how concepts of environmental and economic justice overlap in a diverse array of communities. Students will learn what, exactly, makes a resource "global", and how they simultaneously take on particular local meanings. *Hirsch*

318. Environmental History of Latin America. (NW) (S)
This course will examine the intersections of human history and culture with environmental change in Latin America from the early colonial period to the present. The major themes include the consequences and significance of the Colombian Exchange, the roles of religion and culture in shaping human relationships with nature, the development of export-led agriculture, urbanization, and the emergence of diverse environmental movements within Latin America. We will explore the origins of major environmental problems and the ways people have responded to these challenges. The course will address how historians have approached the study of the environment. *Same as HIS 318*. *Shelton*

320. International Environmental Law.
This course examines principles and instruments of International Environmental Law (IEL), beginning with the nature and sources of IEL and an introduction to the key actors and agencies involved in global environmental governance. Focusing on the development of regimes addressing a range of environmental issues, the course also addresses implementation and state responsibility for environmental harm and dispute resolution. Topics explored include climate change and

atmospheric pollution; the law of the sea and protection of the marine environment; international regulation of toxic substances; conservation of nature, ecosystems and biodiversity; and the intersection of international trade and environmental protection. Students will examine treaties and case law first-hand, and represent vested interests in a simulated negotiation of a multilateral environmental agreement. Prerequisite: ENE 216 or GOV 200. *Same as GOV 320*. *De Santo*

335. Business and the Natural Environment. (S)
Widespread concern for a cleaner environment and sustainable practices has put new demands on business. Exploration of philosophical, theoretical, strategic and policy issues facing organizations in relation to the natural environment. *Same as BOS 335*. *Kurland*

337. Anthropology of Environment. (NW) (S)
The environment is a definitive problem of the twenty-first century. Struggles to counteract climate change, international initiatives to conserve biodiversity, legislation to curb industrial pollution, and protocol for natural resource appropriation all express a commitment to care for the environment. This class troubles the waters: What do we mean by environment? What histories of nature, power, and capital define environment? What are the contemporary economic and political implications of this environmental ethos? In this course, students will grapple with such questions to achieve competency in the anthropology of environment. Prerequisite: ANT100. *Same as ENE337*. *Guarasci*

341. Environmental Chemistry.
Focuses on the chemistry of the atmosphere, hydrosphere and terrestrial environments. The objectives of this course are: 1) to understand the chemical basis underlying environmental processes, which includes understanding chemical composition, thermodynamic and kinetic controls, photochemical, oxidation and reduction reactions, aquo complexes and acid-base behavior; and 2) to use scientific literature to investigate current topics pertaining to environmental chemistry. Prerequisite: CHM112 and one of the following: CHM 221, CHM 212, ENE 226, BIO 220, BIO 323. *Same as CHM 341*. *Morford*

342. Forest Ecosystems. (N)
An exploration of basic and applied forest ecology, with particular emphasis on the organization and dynamics of forest communities, ecosystems, and landscapes. Topics will include forest environments (climate, soils), tree physiology and growth, ecosystem productivity, biogeochemistry, disturbance regimes, biodiversity, and the roles of forests in global ecology. The laboratory will involve one or more field trips and projects lasting one to several weeks. Two lecture/discussions and one lab weekly. Prerequisites: BIO110, BIO220. *Same as BIO 342*. *Sipe*

344. Global Change/Natural Resources. (N)
The Earth and life on it are being altered by humanity at an unprecedented rate. In this course we will study scientific evidence that tells us how Earth has changed in the geologic and historic record. We will investigate the evidence for contemporary climate change and its impacts on humanity. We will study Earth's climate system and the physical and biological feedbacks that play an important role in climate change. Laboratory exercises will focus on methods used to understand present climates and to reconstruct past climates. We will also evaluate methods of quantifying carbon cycling and sequestration. Finally we will evaluate the ways that humanity might mitigate climate change. Prerequisites: ENE 114 or ENE 118 or BIO 101/110. Offered every Spring. *Williams*

350. Landscape Geochemistry. (N)
Introduction to the theory, practice, and application of geochemistry to Earth's surface: Emphases will be placed on understanding the interplay among Earth systems that influence climate and weathering, and the impacts these processes have on soil formation (the Critical Zone). Students will learn to: (a) conduct field research, (b) collect, process, and analyze samples by a variety of analytical methods, and (c) interpret data. Students will think critically by conducting meaningful research that is relevant to real scientific questions. Prerequisites: CHM 111 and ENE 110 or ENE 114 or ENE 118. *Walter*

351. China and the Global Environmental Crisis. (NW) (S)
This course links the local to the global, moving from ecological issues within China to related social issues, to global ecological-economic conditions. The course examines specific cases of environmental harm within China; provides a basic environmental-scientific knowledge of these problems; studies the relationship between these cases studies and poverty, government corruption, migration, ethnic conflict, etc.; and analyzes how the above conditions in China are intertwined with global capitalism, global poverty, and other conditions on the global level. *Same as HIS/STS 351*. *Reitan*

352. Lead Poisoning and Asthma in Urban Lancaster. (S)
Students learn about the epidemiology of asthma and lead poisoning, the pathways of exposure, and methods for community outreach and education. As it is a Community-Based Learning (CBL) course, students will work in service to the local community by collaborating with local school teachers and students in lessons that apply environmental research relating to lead poisoning and asthma in their homes and neighborhoods. They also take soil samples from locations in Lancaster and test their lead levels. *Same as PBH/STS 352*. *Staff*

361. This is Garbage.
Explores the history and fate of refuse around the world. Examines the global environmental and social consequences of a linear production cycle of consumer goods, from extraction through production, distribution, consumption, and disposal. Students will design alternative methods of use and reuse and will measure local consumption and disposal patterns. Lectures will be augmented by discussions and field trips. *Staff*

362. End of Nature?: Contemporary Anthropocene Literature. (H)
Mass extinction, vast gyres of floating garbage, melting polar ice caps, ocean dead zones, rising atmospheric carbon levels, super storms: have we entered the anthropocene—the geologic "age of man"? The experience of an Earth nowhere untouched by humans finds expression in all genres of literature and generates unfamiliar and compelling new ways of conceiving our species and our world. Readings include science fiction, realist fiction, poetry, non-fiction and theory. It is recommended that students complete at least one college-level literature or environmental studies course before enrolling. *Same as ENG 362*. *Mueller*

405. Marine Protected Areas.
This seminar examines the role of Marine Protected Areas (MPAs), a key tool for mitigating anthropogenic impacts on the marine environment. Marine parks pose unique challenges compared with their terrestrial counterparts, and lag behind in terms of global coverage. We take an interdisciplinary approach to understanding the compromises and balances struck in biodiversity conservation, examining the science of marine reserves, social and economic factors, legal frameworks, and political implications of MPAs. Prerequisites: ENE 216 and ENE 314/ GOV 374. *De Santo*

454. Environmental Problems.
Readings, lectures, discussions and student presentations address critical issues underpinning modern environmental problems. Primary literature specific to some of these problems is employed. Working within this framework, students apply their accumulated knowledge of environmental studies and science to propose, conduct and write up a semester long research project exploring a local, regional or global environmental problem. Offered every Spring. *Bratman, Merritts*

490. Independent Study.
ENE 490's are a one or two semester-long research collaboration between a student and a faculty member. Each project involves a research question or scholarly problem where the student will hone skills such as understanding primary literature, collecting and interpreting data, and professional presentation of their work. Students will likely give oral or poster presentations at the spring F&M Research Fair and/or at professional meetings. A written document is expected at the conclusion of the 490. Students who would like to do a 490 should speak with ENE faculty in the area(s) that they are interested in pursuing. Each semester 490 is one course credit. Permission of the faculty member and Department Chair is required and registration for 490's occurs right away in the beginning of each semester. Departmental Honors is usually based on a two semester 490. (Permission of chairperson).

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Waste and Energy.
Environmental Studies Methods.
Urban Sustainability.
Applied Earth Science and Environmental Justice.
China Environmental Crisis.
Structure and Tectonics.

ECONOMICS

Professor Yeva Nersisyan, Chair

David M. Brennan	*Professor of Economics*
Alan S. Caniglia	*Professor of Economics*
Eiman Zein-Elabdin	*Professor of Economics*
Yeva Nersisyan	*Associate Professor of Economics*
Patrick Fleming	*Associate Professor of Economics and Public Policy*
Leanne M. Roncolato (on leave Spring 2023)	*Associate Professor of Economics*
Alex W. Roomets (on leave 2022-23)	*Associate Professor of Economics*
Mark Silverman	*Assistant Professor of Economics*
Han Cheng	*Assistant Professor of Economics*
Danish Khan	*Assistant Professor of Economics*
Tony R. Maynard	*Senior Adjunct Professor of Economics*
Tod S. Porter	*Adjunct Professor of Economics*

Economics has variously been said to be concerned with:

> the allocation of scarce resources among competing uses;
>
> a society's social relations of production, distribution and consumption;
>
> the institutions through which humans have organized their material provisioning.

In line with these varied definitions, the study of economics can be pursued using a mathematical approach, a historical approach, or an institutional and sociological approach. Independently of the particular definition to which they are attracted, well-educated economics students will have familiarity with, and be able to draw on, all three approaches.

Accordingly, the economics curriculum at Franklin & Marshall College provides students with opportunities to study the discipline across the variety of approaches and/or to pursue depth in any approach. The sequence of introductory courses exposes students to both orthodox and heterodox themes and approaches, while the sequence of intermediate level courses emphasizes the core analytical techniques used in different approaches to theoretical and empirical analysis. Electives offer students the opportunity to undertake further exploration of theoretical issues and/or applications of fundamental economic theories to topics of special interest.

The study of economics encompasses a wide variety of models and topics that attempt to explain various social phenomena, including the operation of markets, the distribution of income and wealth, macroeconomic fluctuations, economic growth, international economic relations, the roles of class, culture, gender and race, and the ecological impacts of economic activity. Moreover, a good liberal arts economics education will involve students in interdisciplinary explorations. Economics majors are therefore encouraged to enroll in courses in other departments and interdisciplinary programs such as history, anthropology, government, women, gender and sexuality studies, earth and environment, Africana studies, and public health. Economics majors and minors are also encouraged to pursue opportunities to study abroad, where they are likely to deepen their understanding of the cultural context and nature of economic life. Economics majors have studied abroad in many countries, including: Argentina, Australia, Austria, Bolivia, Chile, China, Costa Rica, Cuba, Czech Republic, Denmark, Ecuador, France, Germany, Greece, Iceland, India, Ireland, Israel, Italy, Japan, Morocco, New Zealand, Russia, South Africa, Spain, Sweden, Switzerland, United Kingdom, Vietnam. See the International Programs section of the Catalog for further information. In order to count toward a major or minor in Economics, courses taken outside of Franklin & Marshall College must be pre-approved by the department chair.

A major in Economics consists of a minimum of 11 courses:

> ECO 100 and 103;
>
> MAT 109 or 110;
>
> ECO 200, 201, 203;
>
> ECO 210 or BOS 250 or MAT 216 (students cannot get college credit for both ECO 210 and BOS 250);
>
> and four electives carrying an ECO designation, at least two of which must be at the 300 level or above.
>
> Students who are majoring in economics are strongly encouraged to complete all the required 200 level courses (ECO 200, 201, 203, and ECO 210 or BOS 250 or MAT 216) by the end of the junior year. ECO 100, ECO 103, and MAT 109 or MAT 110 are prerequisites for ECO 200, which is a prerequisite for both ECO 201 and ECO 203.

Normally, at least eight of the ten ECO course credits (including BOS 250 or MAT 216 as *substitutes* for ECO 210) taken to fulfill the major's requirements must be earned at Franklin & Marshall College.

The writing requirement is met by completion of the normal courses required to complete the economics major.

Students who are contemplating graduate work in economics are strongly advised to undertake adequate preparation in mathematics—normally MAT 109, 110 and 111 (Calculus I, II, III), MAT 216 and 316 (Probability and Statistics I, II) and MAT 229 (Linear Algebra and Differential Equations).

To be considered for honors in economics, graduating seniors must meet the following conditions:

> complete independent research during the senior year that results in a high caliber thesis deemed to be deserving of "honors" by an appropriately composed Honors Committee;
>
> have an economics GPA of at least 3.5 and an overall GPA of at least 3.0 at the beginning of the honors project and at the time of graduation;

complete ECO 200, 201, 203, and 210 or MAT 216 by the end of the junior year; the department may waive this requirement in special cases.

A joint major in Economics consists of eight courses: MAT 109; ECO 100, 103, 200, 201, and 203; and two electives carrying an ECO designation, at least one of which must be at the 300 level or above.

A minor in Economics consists of six courses: ECO 100 and 103, plus four other courses carrying an ECO designation, at least, three of which must be at the 200 level or above. Students who receive credit for either MAT 216 or BOS 250 may not include ECO 210 as one of the six courses comprising the minor in Economics. At least four of the credits for the minor must be earned at Franklin & Marshall College.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

100. Introduction to Economic Principles. (S)
Introduction to micro- and macroeconomics. Neoclassical models of economic behavior, market structures and aggregate economic performance. Topics include: supply and demand analysis; consumer and business behavior; market structures (competition, monopoly, oligopoly) and failures: inflation and unemployment; government fiscal and monetary policies. *Roomets, Roncolato, Silverman*

103. Introduction to Economic Perspectives. (S)
Introduction to economic institutions, history and competing paradigms and ideologies in economics. Conservative, liberal and radical perspectives; orthodox and heterodox economic theories. Topics include: the role of cultural, legal, economic and political institutions; class, gender and race; inequality, wealth and poverty; and the environment.
Brennan, Cheng, Maynard, Zein-Elabdin

135. Socialism. (S)
A course on the history (promises and challenges) of socialism. The historical and contemporary relation between the idea of socialism and concerns with equality, quality of life issues, freedoms, and economic policies. The evolution of ideas of socialism in history. The relation between planning and markets in the history of capitalism and socialism. Diverse historical experiences of socialism at local, regional, and national levels. *Staff*

200. Microeconomics. (S)
The analytical foundations of neoclassical price theory: theory of the consumer; theory of the firm; market structure and efficiency; factor markets and income distribution; general equilibrium. Prerequisites: ECO 100 and 103; MAT 109 or 110 or 111. *Roncolato, Roomets, Staff*

201. Macroeconomics. (S)
Aggregate economic activity: an examination of the factors that influence its level, stability and rate of growth. Consumption, savings, investment, fiscal and monetary policy and international trade and finance as influences on the level of prices, output, employment and income.
Prerequisite: ECO 200. *Cheng, Nersisyan*

203. Value and Distribution. (S)
The analytical foundations of orthodox and heterodox economic theories. The course explains how conceptions of value are intrinsically linked to theories of income-distribution and how theories of value and distribution are associated with "visions" of the economy. The course differentiates among theories according to the ways they conceive the essential role of markets in a capitalist economy and to the weight they assign to "market" and non-market processes in the analysis of the economy (structure and outcomes). Prerequisite: ECO 200. *Cheng, Silverman, Zein-Elabdin*

210. Economic Statistics. (S)
An introduction to statistical concepts and techniques as used in economics. Topics include descriptive statistics, sampling, probability, estimation, confidence intervals, hypothesis tests and regression analysis. Prerequisites: ECO 100 and 103. Not for students who have taken BOS 250 or MAT216. *Fleming*

230. Marxian Economics. (S)
Marx's views on capitalism as a historical social form and analysis of the logic of capitalism and the class relations typical to it. Topics include: the theory of value/prices and the ideology of bourgeois individualism; capitalist relations of exploitation; forms and structures of alienation; capitalist accumulations and crises; the intersection of class and non-class processes, sites and identities; socialism and communism in theory and practice. Prerequisites: ECO 100 and ECO 103 or instructor permission.
Staff

231. Money and Banking. (S)
Commercial and central banking in the United States, including: Federal Reserve responsibility for influencing economic activity; the role of money in determining the level of national income and prices; and the nature of the international monetary system. Prerequisites: ECO 100 and 103.
Nersysian

238. The Economy of Cities. (S)
An overview of the economic forces that have shaped the formation and transformation of cities in history, with particular focus on urban patterns since the 18th century. Topics covered include the effects of technological change (in production, transportation and marketing), urban sprawl, the role of "place" in the power dynamics and conflicts of capitalist societies and the history of urban-economic-development public policy initiatives in the U.S. Required work includes a term paper. Prerequisites: ECO 100 and ECO 103. *Staff*

240. Environmental and Natural Resource Economics. (S)
A survey of environmental and natural resource issues in economic theory and policy. History of the environmental movement and environmental debates; theory of natural resource allocation, natural resource issues; theory of environmental management—for example, externalities, public goods and common property. Topics covered will include pollution, resource depletion, global climate change, and issues affecting the local environment. Prerequisites: ECO 100 and 103, or permission of the instructor. Same as ENE 240. *Fleming*

244. Gender in the Economy. (S)
An analysis of the role gender has historically played and continues to play in the economy, both within and outside of the labor market. Topics include the historical conditions under which dominant gender ideals emerged, the value of unpaid work and national accounting, occupational segregation, labor market discrimination and feminist economic theory. Gender is considered as it interacts with other identities such as race and sexual orientation. Economic and interdisciplinary approaches are used. Prerequisite: ECO 100 and 103, or permission of the instructor. *Same as WGS 244*. *Roncolato*

248. History of Economic Thought. (S)
A survey of ways of thinking about "economic" issues through history, with each one placed in the context of the intellectual and social climate of its times. Special attention will be placed on (1) theories of "value," from classical political economy to Marx to neoclassical thought; (2) the relationship of economic ideas to historical transitions in economic systems; (3) conceptions of the relationship between "economics" and "science." Key figures studied include: François Quesnay, Thomas Munn, Adam Smith, Thomas Malthus, David Ricardo, Karl Marx, William Stanley Jevons, Léon Walras, John Bates Clark, Alfred Marshall, Thorstein Veblen, John M. Keynes, Milton Friedman, Joan Robinson, Nancy Folbre, Tithi Bhattacharya. Prerequisites: ECO 100 and ECO 103.
Cheng, Silverman

264. Introduction to International Economics. (S)
Introduction of key concepts to describe and analyze international economic linkages. Analysis of international transactions in various markets including goods and services, capital, labor and foreign exchange. Core topics include: reasons for and benefits from international

trade; exchange rate developments; benefits and risks of international capital flows; globalization; liberalization; regional integration; and development. Empirical approach with introduction of core theoretical concepts and policy perspectives. Prerequisites: ECO 100 and ECO 103.
Maynard

281. Political Economy of Africa.NW) (S) (WP)
A broad introduction to economic and social conditions in Africa and the factors that influence economic change and well-being in the region. Historical background on pre-colonial systems of production and exchange and economic restructuring introduced by European colonial administrations. Examination of major current economic and political issues, including agricultural production, technological change, dependence on natural resource exports, and the role of the state. Reflection on the question of economic development. Prerequisites: ECO 100 and 103, or permission of instructor. *Same as AFS 281. Zein-Elabdin*

282. Women, Culture and Development. NW) (S) (WP)
Role of gender in different cultures across the non-industrialized world and the impact of economic development on the positions of women and gender relations in these societies. Women's contribution to economic and social change and the extent to which conventional methods of analysis in economics can be applied to their situations. Examination of the construction of the 'Third World woman' in the development discourse. Prerequisites: ECO 100 and 103, or permission of the instructor.
Same as WGS 282. *Zein-Elabdin*

291. Directed Readings.
Tutorial for students who have not yet completed ECO 200, 201, 203 and 210. Students who have a special interest may arrange a tutorial with a faculty member. Enrollment is conditional on instructor's permission.

303. Marxian Theories of Crisis. (S)
This seminar will entail a detailed reading and discussion of the primary literature on Marxian perspectives on capitalist crises with particular attention to the Great Recession. Specifically, the perspectives covered in this course include the profit squeeze, rising organic composition of capital, underconsumption, and stagnation explanations. Also included in this course are Marxian critiques of neoliberalism and financialization. The course will look both at theories and data to support or refute various perspectives. Prerequisite: ECO 203. *Brennan*

310. Econometrics. (S)
An introduction to statistical analysis of economic data, with a balance of theory, applications and original research. The Classical Linear Regression Model is covered in detail, along with typical departures from its assumptions including heteroscedasticity, serial correlation and non-stationarity. Further subjects can include instrumental variables, limited dependent variables and advanced time-series topics, depending on time and student interest. Prerequisites: ECO 100, 103 and ECO 210 or BOS 250 or MAT 216. *Cheng, Roomets*

315. Macroeconomic Stability. (S)
John Maynard Keynes and Hyman Minsky on financial crises and economic recessions. Keynes's critique of the neoclassical approach and his revolutionary investment theory of the business cycle. Minsky's financial theory of investment as an evolutionary understanding of modern financial institutions and their role in preserving or undermining economic stability. Contemporary research to assess the relative effectiveness of monetary and fiscal policies in stabilizing an unstable economy, as well as their impact on employment, prices, and income distribution.
Prerequisite: ECO 203. *Staff*

320. International Trade. (S)
Intermediate and advanced topics in international trade. Introduces theoretical structures and evaluates associated empirical literature. Core topics include examination of the determinants of international trade patterns, the gains from trade, trade policy, the relationship between trade and growth and the institutional evolution of the international trading system. Emphasis on different theoretical approaches, including models based on assumptions of perfect competition and of imperfect competition. Prerequisite: ECO 200. *Maynard, Roncolato*

325. International Finance. (S)
Intermediate and advanced topics in international finance. Introduces theoretical structures and evaluates associated empirical literature. Core topics include determination of exchange rates, the functioning of the macroeconomy under different exchange rate regimes, foreign exchange intervention, currency crises, debt crises, coordinated macroeconomic policy, the evolution and future of the international monetary system as a whole. Emphasis on open-economy macroeconomics.
Prerequisite: ECO 201. *Cheng, Maynard*

335. Economic Development. (S) (NW)
Economic theories of growth and development. Historical and political context of the development discourse and the project of international development. Institutional features and performance of low and middle income economies. Main topics covered include: the role of agriculture, industrialization strategies, income inequality, migration and rapid urbanization, international trade and financial flows.
Prerequisite: ECO 201. *Khan, Zein-Elabdin*

350. Game Theory. (S)
This course examines the economics of strategy using the tools of modern game theory. The aim of the course is to apply strategic thinking to situations that arise in our lives and make better decisions about how best to cooperate and/or compete with others. In this regard game theory provides important insights in understanding strategic interactions in our lives. Examples of such interactions can range from the pricing decisions, R&D investments, and marketing plans of business rivals, to the tactics used in salary negotiations, to the formation of regional trade alliances, to legislative voting behavior. We will develop a general framework for analyzing how to make optimal strategic decisions, and for predicting what will happen in any given strategic economic environment. As we develop the mathematical framework in class, we will apply it to various economic decision problems, as well as to examples in other areas. We will first analyze the simplest of strategic situations, those in which actors make their decisions simultaneously and have complete information about each other's payoffs. We will then analyze situations in which actors make their decisions sequentially and must think ahead about how others will respond to their decisions. Next we will examine more complex situations in which actors possess incomplete information about others, payoffs. For each type of situation, our goal will be to predict how rational actors should behave. We will discuss the strengths and limitations of these methods as well. We will also evaluate the relative success of the predictions from theory in predicting how people actually behave in strategic settings. Prerequisite: ECO 200. *Roomets*

354. Behavioral Economics. (S)
The objective of the course is to expose students to the positive (descriptive) side of microeconomic theory, and behavioral economics in particular. Much microeconomic theory is fundamentally normative (prescriptive) in that it answers the question: What SHOULD a decision maker do in a particular situation? Positive economics generally seeks instead to answer the question: What WILL a decision maker do in a particular situation? The course teaches students how these two approaches relate to one another using examples from microeconomic theory. Prerequisite: ECO200. *Roomets*

357. Experimental Economics (S)
Students in Experimental Economics will learn how to apply the scientific method to economic theories. Such application has led to advancements in economists' understanding of real-world economic behavior. The class will mainly focus on experimental design and methodology but will also touch on topics such as market theory, game theory, and behavioral theory. Class time will be split between lecture and lab sessions where students will participate in economic experiments. Prerequisites: ECO 200 and ECO 210. *Roomets*

360. Law and Economics. (S)
A study of the relationship between economic analysis and legal rules and institutions. Topics include: the neoclassical concept of "efficiency" as applied to legal rules; the relationship between efficiency, preferences, and distribution; the Coase theorem; cost-benefit analysis in environmental law; and positive and negative conceptions of "liberty" as manifest in varying fields of law, including US Constitutional jurisprudence and

government "regulation" of the market. Throughout the course, we will be asking what sort of norms and values provide the ground for differing theories of "law and economics." Prerequisites: ECO 200 and ECO 203.
Silverman

381. Postcolonial Perspectives on Development. (S) (WP)
A seminar on the question of economic development from the perspectives of formerly colonized societies, which are today described as 'less developed' or 'third world' countries. The idea of development in European thought, postcolonial critiques of development, and the contours of postcoloniality and postcolonial thought, including cultural hegemony, orientalism, hybridity. Readings are multidisciplinary. Permission of instructor required. *Zein-Elabdin*

391. Directed Reading. (S)
Tutorial for students who have completed ECO 200, 201 and 203. Students who have a special interest may arrange a tutorial with a faculty member. Enrollment is conditional on instructor's permission.

490. Independent Study.
Independent research directed by the Economics staff. Permission of the instructor.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Capitalism, Crisis, and Covid.
Race and Inequality in the U.S.
Understanding Your Work.
Globalization: Production, Class, and State.
Public Finance.

ENGLISH

Professor Peter Jaros, Chair

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The English major at Franklin & Marshall offers students a choice between two complementary tracks, one emphasizing literary study, the other creative writing. We require majors in either track to have some experience in both areas. Studying literature and practicing creative writing develop in us obvious skills—skills of reading, writing, analysis, creativity and critical thinking—but they also enable us to engage with the rich diversity of human experience.

Since we cannot separate language or literature from their cultural and intellectual contexts, the literature component of the English major at Franklin & Marshall offers a substantial historical base, with core courses on topics in the traditional periods of British and American literature. Additionally, students take thematic courses in subjects like "Caribbean Literature," "Nature and Literature," "Graphic Novel," "African Literature," and "Baseball in American Literature and Culture," as well as upper-level seminars in authors or topics that build on the historical core.

The track in creative writing joins the passion for language and imaginative writing with the study of literature. It is built upon the premise that reading widely and deeply in literature, including contemporary literature, is essential to becoming a skilled creative writer: in other words, that the best writers are also avid, engaged readers. Students who choose a concentration in creative writing practice the craft of writing poetry, fiction and nonfiction in workshop settings where writing is valued as a serious art form. The major culminates in an advanced creative writing workshop in which students complete creative theses in the genre of their choice. The creative writing major is a gateway to a lifelong love and appreciation of words.

Literature majors also take at least one course in creative writing. All students, through their own attempts to write creatively, can develop an appreciation for how the great works they study in their literature courses might have been

created. English majors in both tracks come to appreciate the rigor that both disciplines—literary criticism and creative writing—entail.

English majors have rich research opportunities beyond the requirements of the major through independent study and Hackman summer research scholarships, which engage students with the scholarly activities of their professors. They also have opportunities for involvement in a range of extra-curricular activities: attending readings by and meeting numerous visiting writers, participating in events at the Writers House, helping to plan the Emerging Writers Festival, or writing for or staffing one of the College's literary publications.

English majors are highly valued for their abilities to think and write. The study of English is not just good preparation for a career, however. It fosters an engagement with the big questions of living—questions about language, meaning and value. It fosters self-reflection and greater awareness of the natural and social worlds in which we live. Moreover, studying English literature gives us a purchase on how narratives and metaphors work so that we can interpret and deploy them wisely and even re-make them for our own time, with its enormous challenges and demands.

A major in English with a concentration in Literature consists of the following eleven courses, at least two of which must be literature courses at the 300-level: ENG 226; two Pre-1800 literature courses (ENG 201, 202, 203, 206, 212, 256, and 200- and 300-level courses designated as Pre-1800); two Post-1800 literature courses (ENG 204, 207, 208, 210, 257, and 200- and 300-level courses designated as Post-1800); one course designated either Pre- or Post-1800; one creative writing course (ENG 225, 381, 382, 383, 384); two electives; and two 400-level seminars.

A major in English with a concentration in Creative Writing consists of the following eleven courses: ENG 226; three creative writing courses (ENG 225, 381, 382, 383, 384); one Pre-1800 literature course (English 201, 202, 203, 206, 212, 256, and 200- and 300-level courses designated as Pre-1800); one Post-1800 literature course (ENG 204, 207, 208, 210, 257, and 200- and 300-level courses designated as Post-1800); one course designated either Pre- or Post-1800; one designated Contemporary literature course; one elective; one 400-level literature seminar; ENG 480.

The English minor consists of any six English courses, at least three of which must be literature courses, and at least three of which must be at the 200-level or above.

The writing requirement in the English major is met by completion of the normal courses required to complete the major.

Students are urged to consult with departmental advisers about appropriate courses within the department and in related fields.

Majors in the Department of English have studied abroad in the following programs in recent years: Advanced Studies in England, Bath; various programs in London, Scotland and Australia. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

REQUIRED MAJOR COURSES

226. Engaging Literary Texts: Introduction to Literary Study. (H)
What are some of the ways that works of literature engage us, and in turn how can we learn to engage in various ways with literary texts: their words on the page, their imagined communities, their invented characters? How can learning about and practicing different interpretive approaches incite our readerly pleasures as well as our understanding and excitement about a work of literature's complexity of language and form, its aesthetics, and its power both to represent and transform lives and times and places.
Bernard, Jaros

Pre-1800 Literature. (H)
These regularly offered courses examine selected issues and ideas in the traditions of British and American literature in the historical periods before 1800. ENG 201 covers British Literature from the Medieval Period; ENG 202 examines British Literature from the Renaissance; ENG 203 treats British Literature from the Restoration and the 18th century; ENG 206 treats American Literature from its beginnings through the 1830s; ENG 212 covers Shakespeare; ENG 256 examines African-American Literature from the colonial period through the 19th century. The department also offers 300-level courses designated "Pre-1800."

201. Medieval British Literature. (H)
This course surveys selected major works and other representative examples of Old and Middle English literature, and some Latin and French texts written in England, from approximately the eighth through the fifteenth centuries. The course explores the development of medieval attitudes and themes in a variety of forms and genres, including poetry, prose, and drama. Readings may include *Beowulf* and other Old English poetry in translation; St. Bede's *Ecclesiastical History*; Arthurian material such as Geoffrey of Monmouth's *History of the Kings of Britain* and Thomas Malory's *Morte D'Arthur*; Piers Plowman; *Sir Gawain and the Green Knight* as well as other Middle English romances; and a selection of plays from the N-Town cycle for Corpus Christi. Students will gain extensive experience and practice reading and analyzing the English language at various stages of its historical development, including Old and Middle English. *Same as LIT 203*. (Pre-1800) *Huber*

202. The Renaissance Humanist:
Early Modern British Literature. (H)
The traditional "Renaissance Humanist" was an idealized figure of the educated person in early modern Europe. This figure was a "he." In England, "he" was a White, Anglo-Saxon, Protestant Christian. "He" became a symbol of the many monumental achievements of the early modern European period: the discovery of the New World, the rediscovery of classical texts, the invention of the printing press, the reformation of the Western Church, and the formulation of a recognizable English language. In this course, we will take as our subject the traditional "Renaissance Humanist" within the context of today's DEI ("diversity, equity, & inclusion") initiatives. How does "he" look to us today in this DEI context and in the texts of Shakespeare, Edmund Spenser, Thomas More, Milton, and Queen Elizabeth I (herself!). We will expand the "traditional" literary canon to include demographic "outsiders." Meets Pre-1800 requirement for the English major. (Pre-1800) *Goeglein*

203. Eighteenth Century British Literature. (H)
A period of enormous social, intellectual and political revolution, the so-called long eighteenth century in Britain (1660-1800) calls into question age-old assumptions about the nature of humanity. From the sex comedies of the Restoration to the satires of Jonathan Swift, the treatises of Mary Astell, the novels of Daniel Defoe and Frances Burney, the neoclassical poetry of Alexander Pope and the lyric poetry of Thomas Gray, literature of the eighteenth century engages in debates about gender, slavery, social class, human nature and our place in the cosmos. Social, intellectual and

literary developments of the age still shape our modern world and our understanding of what it means to be a human being. (Pre-1800) *Mueller*

206. American Literature I:
Insiders and Outsiders in Early American Literature. (H)
This course draws on the diverse body of writing that stretches from Euro-American contact to the early years of the United States. The texts we'll read are loosely gathered around the problem of belonging: distinguishing insiders and outsiders, considering what is at stake in making this distinction, and exploring what happens when the distinction breaks down. (Pre-1800) *Jaros*

212. Sex, Lies and Shakespeare. (H)
Disguise & lies & sex, swearing & pairing, sins & twins, fear & a bear. Shakespeare brought all this to the London stage, and this course brings it to U. The basic course goals: to understand and appreciate the achievements of Shakespeare's written poetry and drama and to comprehend the interpretive role you play, and the interpretive role mixed-media play, in the thematics of sex and lying. (Pre-1800) *Same as WGS212*. *Goeglein*

211. The Bible as Literature. (H)
The bible is a literary masterpiece of many books. Bible comes from the Greek "ta biblia," which means "the books." Today, we use the term bible as a singular noun and tend to think of it as a title rather than a classification, which it is. It was written in many languages, by many hands, over more than a millennium. It is a collection of many literary genres: love poetry, creation myths, epistolary narratives and Passion narratives, prophetic allegory, farcical drama, formulaic speeches, and stories of greed, political downfall, and remarkable hope. In this course, we will explore the bible as a work of literature even as we will respect the role it plays as a sacred text in many faith traditions. All biblical readings will be in its English translation known as the King James Bible, which was published in 1611. We will discuss this important version of the bible and place it in the context of the many, many versions, editions, and translations of the bible. No experience with the bible is necessary or expected. (Pre-1800) *Same as LIT 211*. *Goeglein*

256. African American Literature I:
Declarations of Independence and the Narratives of Slavery (H)
This course covers African American narratives of slavery from the colonial period through the early 19th Century. The Declaration of Independence, the founding narrative of American selfhood and agency, provides the discursive background of the course. The Declaration did not mention Slavery, thereby erasing Slaves' experiences in the American narrative about peoplehood. We will engage the logic, rhetoric and contradictions of the document by pluralizing "declaration" to broaden and then examine how Slaves' oral narratives (the Spirituals, etc.) and texts (by Phyllis Wheatley, Oladuah Equaino, etc.) were figurative and literal declarations of independence that simultaneously question the Declaration›s principles and ideology and affirm its transcendent meanings in the writers' discourses on Slavery, Black humanity and selfhood, race, the American Dream, etc. (Pre-1800). *Same as AFS/AMS/WGS 256*.
Bernard

322. Plague and Public Rage in Shakespeare. (H)
The bubonic plague raged through England during Shakespeare's entire life (1564-1616). It was terrifying, contagious, lethal, and a constant presence in everyone's mind. It "infected" Shakespeare's plays: "A plague on both your houses" (Romeo & Juliet). The traumatic resonances between Shakespeare's lifetime and ours are uncanny. Not only did Shakespeare endure a public health crisis, but he also witnessed public rage as a result of the plague. Public rage erupted as well from England's polarized politics, economic inequalities, religious controversies, and diverse demographics, all exacerbated by the plague. In this course, we will move among Shakespeare's plays, his world, and ours. How do his plays reflect the intersections of plague and public rage, both then and possibly now? What do the plays say about political protest? Public health? Mass mentality and individual ethics? Statecraft and stagecraft? The value of art in a time crisis? (Pre-1800) *Goeglein*

352. Madonnas, Mothers, & Virgins: Medieval Religious Women. (H)
This course will examine a range of texts written about, for, and—especially—by women, and will attempt to unravel how gender and religion reflect and shape one another from the twelfth through the fifteenth centuries. We will look at early saints' lives and spiritual guides written for female audiences, letters written by women theologians, hagiographic romances, miracle plays, and narratives of female spiritual revelation. Meets pre-1800 requirement in the English major. (Pre-1800). *Same as LIT/WGS 352*. *Huber*

363. Reading Characters in the Atlantic World. (H)
Texts from the eighteenth-century Atlantic world raise a number of related questions: What constitutes individual character: reputation? personal particularity? the body or face? Can one "read" a person like a book? How can printed texts both depict character and contribute to its formation? And why did readers and writers in early America and the broader Atlantic world find these questions so important? Through genres including drama, didactic sentimental fiction, gothic romance, and memoir, we'll expand and unsettle the way we understand both "reading" and "character." Meets Pre-1800 requirement for Creative Writing and Literature majors and the 300-level literature requirement for majors in the literature track. *Same as LIT 363*. *Jaros*

Post-1800 Literature. (H)
These regularly offered courses examine selected issues and ideas in the traditions of British and American literature in the historical periods after 1800. ENG 204 covers British literature in the 19th century; ENG 207 covers American Literature from the founding of the Republic to the Civil War; ENG 208 extends from the Civil War through World War II. ENG 210 treats 20th-century literature written in English; ENG 257 examines African-American Literature of the 20th century. The department also offers 300-level courses designated "Post-1800."

204. Nineteenth Century British Literature. (H)
The nineteenth century was rocked by social, scientific, technological and political transformations, yielding responses from high exuberance to deep anxiety about the new and the old. At the heart of the cacophony of voices lay a set of essential questions: What forces of the past shape the present of the individual, the community, the nation? What beliefs and practices must be changed, to give way to the new, the modern? What are the costs and benefits of progress? This course takes its keynotes from poet Wordsworth, natural historian Darwin and novelists such as Mary Anne Evans [pseud. George Eliot], Charles Dickens, and Thomas Hardy. Other texts may include Victorian children's literature, essays on The Woman Question by J.S. Mill and Florence Nightingale, Tennyson's poetic reinventions of myth, and Conrad's modernist novel, Heart of Darkness. (Post-1800) *Mongia*

207. American Literature II: American Nobodies. (H)
Ralph Waldo Emerson, Henry David Thoreau, and Frederick Douglass aren't usually considered "nobodies." Yet along with other American writers of the early nineteenth century, they experimented with, as Emily Dickinson puts it, being nobody. Being nobody could mean slipping out of one's life to watch it from the outside, or finding oneself mysteriously doubled, or conceiving of the self as a deeply passive structure, created by external events. We will study how a variety of literary texts propose unusual models for selves in general and American selves in particular. Meets Post-1800 requirement in the English major. (Post-1800)
Goldberg, Jaros

208. American Literature III: Individuals vs. Systems. (H)
What is the power of one individual to resist oppression? Can a person's love conquer all? Or are we at the mercy of forces like biology, economics, and technology? For American writers at the turn of the twentieth century, these questions were paramount. Fascinated by new theories of nature and society, Mark Twain, Frank Norris, Edith Wharton, Charlotte Perkins Gilman and others experimented with narratives in which characters were pitted against powerful systems. We will study these narratives as well as the philosophical and cultural contexts in which they emerged. (Post-1800) *Goldberg*

210. Modernism and Modernity. (H)
In this course, we'll explore how modernist writers—such as James Joyce, Virginia Woolf, Ezra Pound, W.B. Yeats, André Breton, and T.S. Eliot—rebelled against the literary conventions of their day. In stunning, iconoclastic verse and prose, these writers turned to surrealist mind games, stream of consciousness narration, Freudian psychology, experimental cinema, and jazz-inflected metapoems to question the meaning of literature itself. Some issues we may consider: literary constructions of mind and self, early twentieth-century gender roles, WWI, Irish independence, mass entertainment, Futurism, Imagism, and bodies/machines. (Post-1800)
Abravanel

257. African American Literature II:
Meaning of the Veil and African American Identity. (H)
In *The Souls of Black Folk* (1903), the African American writer W. E. B. Du Bois introduces two concepts—the "veil" and "double-consciousness"—to explain the black experience in America. This course, which covers African American literature from Reconstruction to the Harlem Renaissance, the Black Aesthetic/Black Power movement and beyond, will examine the recurrence of the veil metaphor (and its synonyms) generally and engage Du Bois's formulation of the concept specifically in the cultural and historical contexts that frame this period's literature. We will explore how writers (Paul Laurence Dunbar, Langston Hughes, Zora Neale Hurston, Ralph Ellison, Toni Morrison, etc.) engage topics (race, gender, music, identity, etc.) that reinforce, expand and/or complicate Du Bois's metaphor. (Post-1800.)
Same as AFS/AMS/WGS 257. *Bernard*

316. Harlem Renaissance. (H)
The Harlem Renaissance represented an explosion of Black cultural, economic and political activity in the first and second decades of the twentieth century. Fifty years after emancipation, African Americans were still struggling for equality and acceptance from White America. The cultural products of the period -- events, writings, music, theater, and literature, for example -- represented a desire by African Americans to forge a new identity and find a place in American democracy. We will explore how African Americans used these cultural products to express their history, experiences, predicaments, hopes and racial consciousness and pride. In this course, we will examine some of the writers and the texts of the period. *Same as AFS/AMS 316.* *Bernard*

ELECTIVES

161. Science Fiction. (H)
Comprising a broad survey of twentieth- and early twenty-first-century science fiction, our readings will include 4 novels and numerous works of short fiction. Although science fiction has its roots much earlier in literary history, we'll begin in the so-called "Golden Age" of science fiction (beginning in the '30's), then move through the "New Wave" that begins in the '60's, Cyberpunk and more. *Mueller*

164. Fictions of Adolescence. (H)
This course explores the idea of adolescence through narrative fiction. How does narrative define and construct the adolescent experience through time? Attention will be paid to issues of gender as well. Texts include: Mark Twain's *The Adventures of Huckleberry Finn*; Louisa May Alcott's *Little Women*; Sylvia Plath's *The Bell Jar*; John Knowles' *A Separate Peace*; Suzanne Collins' *The Hunger Games* and Peter Cameron's *Someday This Pain Will Be Useful to You.* *Hartman*

165. Violence, Truth, and Story. (H)
This course examines the literature of human rights and trauma: stories responding to the U.S. Civil War, the Haitian revolution, and the Rwandan genocide, as well as murder, suicide, and PTSD. Despite their content, the texts we study aren't dominated by horrific images. Instead, they approach their subjects through unconventional narrative forms. We'll work to understand how and why they do so—to come to terms with the complexities of stories about violent experiences. *Goldberg*

169. Caribbean Literature. (H) (NW)
What is Caribbean literature? Some writers and scholars question the identity of a region of so many diverse languages, races, ethnicities, religions, and nations. At the same time, others argue for the coherence of a region marked by a history of European colonization and slavery. This course will focus on anglophone (English-language) Caribbean literature of the twentieth century, a rich and varied body of work that has recently produced two Nobel Prize winners, Derek Walcott and V.S. Naipaul. In this course, we will explore how this literature grapples with issues of race, gender, nationalism, independence, decolonization, the ethics of violence, the importance of vernacular expression, and the formation of a literary tradition. *Same as AFS 169.* *Abravanel*

182. Tolkien's Mythology. (H)
J. R. R. Tolkien's *The Lord of the Rings* is often described as one of the most important and influential novels of the twentieth century, yet it is commonly banished from the literary canon. Why is this? This course examines Tolkien's role as an author of popular fiction as well as of "great" literature, and will address the following questions: what is the relationship between Tolkien's scholarship and his fiction, between the medieval text that informed his intellectual life and his novels? To what extent do Tolkien's experiences during the Great War affect the mythology of Middle Earth? Is *The Lord of the Rings* good literature, and what kinds of criteria do readers and critics use in answering this question? Readings include *The Lord of the Rings*, *Beowulf*, *Sir Gawain and the Green Knight*, and selections from the *Silmarillion*. *Same as LIT 182.* *Huber*

229. Writing and Community. (H)
This Community-Based Learning course will give students the opportunity to both experience and reflect upon the role of the creative writer-as-educator-and-or-arts-activist. In class we will engage in exercises designed to increase our understanding of writing as both craft and practice. Students will produce significant written work for the course, including poems, fiction, and essays, journal entries, lesson plans, and a final essay and portfolio. They will also work in teams to lead creative writing workshops in the Lancaster community. *Sherin Wright*

231. Women Writers I. (H)
A study of the experiences of women as presented in selected British and American literature from the Middle Ages through the 19th century, as presented from a variety of cultural perspectives. We will consider various readings of the texts, including those that emphasize feminist theory and historical context. Among others, we will be reading Jane Austen, Aphra Behn, Anne Bradstreet, the Brontës, George Eliot and Mary Wollstonecraft. *Same as WGS 231.* *Hartman*

233. Women Writers II. (H)
A study of the changing world of American and British women in the 20th century as portrayed by women writers. The critical emphasis will be on feminist theory and the political, social and cultural background of the times. Among others, we will read works by Margaret Atwood, Toni Morrison, Sylvia Plath, Adrienne Rich, Anne Sexton, Edith Wharton and Virginia Woolf. *Same as WGS 233.* *Hartman*

250. Contemporary American Short Story. (H)
An examination of the current state of American short fiction. We will read, discuss, and write about arguably important short stories, most published within the past 25 years, in an attempt to explore some of the predominant concerns and formal innovations of today's short story writers. We will not consider these writers in a vacuum but rather in the context of those writers who have preceded them. Writers include Raymond Carver, Denis Johnson, Junot Diaz, George Saunders, Alice Munro, and others. This course counts as a "contemporary literature" requirement for English majors with a concentration in creative writing. *Montemarano*

253. Epic and Romance. (H)
This course focuses on epic and romance: two genres of ancient literature which mutually inform and influence each other, and both of which formulate the foundations and inspirations of popular 21st-century genres of fiction (fantasy, science fiction, romance, among others). Readings will be selected from texts including Homer's *Iliad* and *Odyssey*, the Irish *Táin Bó Cúailnge* (*The Cattle Raid of Cooley*), *Beowulf*, the Arthurian romances of Chrétien de Troyes, *Sir Gawain and the Green Knight*, and Geoffrey Chaucer's *Troilus and Criseyde*. Our discussions will focus on the formation of the notion of heroism, and examine various stages in the development of concepts of heroism in western culture, and the cultural fantasies that accompany it. Above all, epic and romance concern themselves with the process and problematics of self-definition, that of the individual and of the community as a whole. The course addresses

the following questions: How was reading used as a method of unifying culture in secular communities? In what ways did these narratives affirm and/or challenge societal rules? How does this literature treat figures of the nation and the king? The conventions of gender? *Same as LIT 253*.
Huber

258. Contemporary Science Writing. (H)
In this course, we will examine texts ranging from popular science to science fiction, by scientists and nonscientists alike. As readers, we will be interested in the ways people write about science, and, as writers, we will try to put some of these principles into practice. We will be equally interested in the ethical, social, and philosophical questions that contemporary science raises, and in how to probe these questions in writing. *Same as ENE/STS 258*. *Anderson*

260. Nature and Literature. (H)
Readings from a variety of traditions, periods, disciplines and genres to discover diverse assumptions about nature and humanity's relation to it. Readings from both Western and non-Western cultures, though with emphasis on the British and Euro-American traditions. Such broad exploration across vast divides of time and culture should not only teach us about varied understandings of nature but also encourage self-consciousness as we form our own conceptions of what nature is and how we ought best to interact with and in it. *Same as ENE 260*. *Mueller*

262. Contemporary Young Adult Literature. (H)
Young Adult Literature is, in name, a contemporary invention. A category defined by audience rather than genre, Young Adult literature has morphed over the past several decades to encompass an increasing range of themes and issues as well as diverse modes of narration and expression. This course will take a particular interest in the theme of identity, including (but not limited to) identity formations around issues of race, ethnicity, social class, gender, sexuality, mental health, and disability. The course will consider both realistic and speculative iterations of YA Lit. Students will need to be prepared to read widely to explore what it means to treat contemporary young adult literature as literature, with the tools we have available to us as critics and scholars. While primarily a literary studies course, the course may include creative writing prompts and options for interested students. *Abravanel*

265. Contemporary Graphic Novel. (H)
In this course, we will develop an historical, aesthetic and formal understanding of contemporary graphic fiction. We will study the genre's precedents in early comics, the interplay of the comics and their historical and cultural contexts, graphic fiction's engagement with high art, and the formal elements of graphic texts. Readings will include comic strips and comic books from 1900 to the present, *Maus I* and *II*, *Watchmen, Fun Home, Jimmy Corrigan, It's a Bird, Black Hole*, and other comics. *Same as ART 265*. *Sherin Wright*

315. Literary Theory. (H)
This course focuses on the big ideas that animate literary criticism, from sexuality to the unconscious, race to colonialism, signification to deconstruction. We study questions such as: What is subjectivity? How do words get their meaning? Where does gender come from? Our goal is to see literary texts, but also the world around us, in new and challenging ways. Students enrolling in this course should have taken at least one college-level literature course. *Same as LIT315*. *Goldberg*

362. End of Nature?: Contemporary Anthropocene Literature. (H)
Mass extinction, vast gyres of floating garbage, melting polar ice caps, ocean dead zones, rising atmospheric carbon levels, super storms: have we entered the anthropocene -- the geologic "age of man"? The experience of an Earth nowhere untouched by humans finds expression in all genres of literature and generates unfamiliar and compelling new ways of conceiving our species and our world. Readings include science fiction, realist fiction, poetry, non-fiction and theory. It is recommended that students complete at least one college-level literature or environmental studies course before enrolling. Meets Post-1800 or Contemporary English major requirement, not both. *Same as ENE 362*. *Mueller*

366. Contemporary Queer Poetry & Poetics. (H)
What does Whitman mean by "manly love"? Does it matter if Nikky Finney identifies as queer if her syntax does so on her behalf? Is queer theory a poetics of sexuality? Or is poetics a queer theory of literature? This course will examine the current state of queer poetry and a variety of critical theories as they pertain to the contemporary literary landscape. We will read, discuss, research, interview, experiment alongside, and write about poems & poets published within the last century in an attempt to better understand how both queer and trans poetics have irreparably affected the direction of American poetry. *Same as WGS 366*.

387. Writing for Television. (A)
Combining workshop, lecture, class discussion, and in-class writing exercises, this course explores the fundamentals of the art and craft of writing for television. Over the length of the semester we will investigate the nature and meaning of "drama" and "visual narrative" as functioning on the small screen. We will do this in part through the examination of format, style, structure, and needs of the network/streaming sites for both a comedy (30 minute) and a drama (60 minute) series. We will also study the basics of scene building, conflict, character, and dialogue by writing a draft of both a "spec" script and an original pilot. Students will develop and complete an outline and first draft of a television pilot on their own and in collaborative groups. *Same as TND/FLM 387*. *Silberman*

390 and 490. Independent Study.
Independent study directed by the English staff. See chairperson for guidelines and permission.

WRITING COURSES

Writing courses, to which admission is only by permission of the instructor, are limited to enrollments of no more than 15 students.

CREATIVE WRITING COURSES

225. Introduction to Creative Writing. (A)
A general introduction to the modes and means of writing poetry, fiction, and creative non-fiction with an emphasis on writing exercises and revision. Students will be introduced to the workshop method of critiquing student writing, which means you'll have the chance to have your work discussed by your peers, and vice-versa. Meets creative writing English major requirement. *Anderson, Hartman, Montemarano*

381. Writing Fiction. (A)
A workshop for students who have found fiction writing a satisfying means of self-expression and who now are ready to raise their work to a higher level. Students will write and significantly revise two or more short stories. What we read in this class—student work as well as contemporary published fiction—we will read as writers, meaning: with extreme attention to craft. We shall concern ourselves with the many choices writers make and the effects of these choices. We will practice writing dazzling sentences. Permission of the instructor required.
Montemarano

382. Writing Poetry. (A)
English 382 is an intermediate poetry workshop focused on generating and analyzing student work with the intention of fostering creative experimentation and bettering craft. Assignments will investigate the powerful tradition of lyricism, inherited form, and poetic genre (the elegy, the manifesto, the performance persona, etc.) while exploring the way rhyme, metre, and other poetic techniques can turn convention on its head. Participants will read widely while engaging American and international poets with whom we are in conversation on the page and the stage. The semester will culminate in a portfolio of revised student work distributed as a chapbook. Students of all majors are encouraged to enroll. Meets creative writing English major requirement. Permission of the instructor required.

384. Writing Nonfiction. (A)
A workshop for students ready to find their voices in a genre that claims to tell the truth without making it up. As a term, "nonfiction" says what it is by saying what it isn't, but if nonfiction is anything that is not fiction, where are its boundaries? Where does its creative dimension take shape?

We will read works of contemporary memoir, essay, and experimental nonfiction, and students will write and significantly revise two or more nonfiction texts that report, interrogate, and play with the truth. Permission of instructor required. Meets creative writing English major requirement. *Anderson*

480. Advanced Creative Writing Workshop. (A)
This is an advanced workshop for writers of fiction, poetry, nonfiction or drama. Each student will use the semester to finish writing, revising and organizing a creative writing thesis—a body of the student's best work. Participants will read and discuss their own and each other's theses-in- progress. Students will be expected to revise and tighten individual poems or stories, to shape their theses and to understand the aesthetic choices they are making. Permission of the instructor required. *Anderson, Montemorano*

SEMINARS

Seminars, to which students are admitted only by permission of the instructor, are limited to enrollments of no more than 15 students. Seminars examine various topics, issues and authors.

417. A Feeling for Fiction. (H)
When we read a novel, we expect to feel something. Yet when a work blatantly makes a play for our feelings, we dismiss it as sentimental or manipulative. This course explores the literary and cultural history underlying these intuitions. By tracing the interwoven histories of the novel, emotion, aesthetics, gender, and the self in eighteenth- and early nineteenth-century transatlantic literary culture, it examines the changing relationship between feeling and fiction. Texts include works (like Goethe's The Sorrows of Young Werther) renowned in their own time for their emotional impact and works (like Tenney's Female Quixotism) that trumpeted the dangers of fiction and thereby acknowledged its emotional and political power. Prerequisite: permission of the instructor. Completion of ENG226 and a 300-level ENG literature course is recommended. *Jaros*

462. Toni Morrison. (H)
This seminar will focus on Toni Morrison as a major African American and American writer. We will examine Morrison's oeuvre in both fiction and criticism, and explore how her aesthetics and vision, and her analyses of them, are informed by historical contexts and their racial, sexual, gendered, class, etc. impulses. Permission of the instructor required. *Same as AFS/WGS 462.* *Bernard*

463. Arthurian Legends. (H)
This seminar examines the cultural history of the Arthur myth through the Middle Ages and contemporary literature and popular culture. Readings will begin with some of the Celtic background to the legends of King Arthur, and will then address the history of the romance narrative tradition in the writings of Geoffrey of Monmouth, Chrétien de Troyes, and Thomas Malory. We will also consider ways that the Arthurian tradition has been revised and revisited in more recent contexts, from the poetry of Alfred Lord Tennyson, to novels such as T. H. White's *The Once and Future King*, to films like Boorman's *Excalibur* and *Monty Python and the Holy Grail*. Permission of the instructor required. *Huber*

467. Virginia Woolf. (H)
In her essay "Modern Fiction," Virginia Woolf wrote, "let us record the atoms as they fall upon the mind in the order in which they fall, let us trace the pattern, however disconnected and incoherent in appearance, which each sight or incident scores upon the consciousness." This proposition reflects Woolf's turn from realism to a modernist style devoted to interiority, impressionism, wordplay, and what she called "breaking the sentence and the sequence." At the same time, Woolf, an ardent feminist, wrote compellingly about the politics and culture of the early twentieth century. This course will consider Woolf's major works alongside excerpts from the letters and diaries, charting her formal innovations as well as her social critiques. Through an examination of literary criticism, we will explore the main tendencies in Woolf studies from the 1970s to the present day. Permission of the instructor required. *Same as WGS 467.* *Abravanel*

470. Henry James: Story of the Mind. (H)
In 1881, Henry James created literary history with The Portrait of a Lady: it was the first novel to contain an entire chapter in which nothing happens—except that the lady thinks. This course will look backward and forward from this moment in James's career to examine how his representations of mind and body develop and evolve. We'll be guided by James's cast of adventuring ladies—from the American flirt in Venice, Daisy Miller, to the righteous ghost-seeing governess of The Turn of the Screw, to the two women sharing one lover in The Golden Bowl—as we study psychology and narrative from the 1870s to the 1910s. Permission of the instructor required. *Goldberg*

473. William Blake: Vision & Myth. (H)
A seminar on the work of William Blake (1757-1827), London artist, poet, revolutionary, and visionary—as well as the work of a few twentieth and twenty-first artists influenced by Blake's visions. The seminar will examine Blake's visual art and his poetry, with emphasis on the latter. Blake readings will range from the deceptively simple and lyrical *Songs of Innocence and of Experience,* to reflective works such as *The Marriage of Heaven and Hell,* to the haunting "Mental Traveler," to elaborately visionary and apocalyptic pieces, in which Blake created his own complex mythological system, such as *The Book of Urizen, America: A Prophecy, and Visions of the Daughters of Albion*. Possible twentieth and twenty-first century works include Allen Ginsburg's "Sunflower Sutra" and and "Howl," David Almond's Skellig (YA fiction), and C. S. Lewis's The Great Divorce, a Christian rejection of Blakean vision. Students will participate in "springboard" groups whose task it will be to research a topic relevant to the day's reading and initiate weekly discussions; they will also write short papers and a final 10-15 page analytic research essay or a hybrid creative/analytic research essay. Permission of the instructor is required. *Mueller*

489. Shakespeare Out of Time. (H)
In this seminar, we will deliberately study Shakespeare, his poems, and his plays out of their historical context and put them in other "out of order" time-frames. In other words, we will read anachronistically. This happens often in performances and film adaptations of Shakespeare's plays: think *Henry 5* on WWI battlefields or *As You Like It* in 19th-century Japan. Other performances try to reconstruct the conditions of "the Shakespearean stage," with hose, doublets, and saucy wenches. A problem with this kind of performance/reading practice is that we spectators/readers aren't really living in the English Renaissance: think no electronic devices, no democracy, and no (respected) diversity. *Goeglein*

494. Contemporary Indian Literature: India in English, English in India. (H) (WP)
Although fiction by Indians writing in English since the 1980s is probably best known on the world stage, Indians have been prolific producers of literature in English in a variety of genres for the last two centuries. Through exposure to fiction, poetry, and non-fiction, this course will offer a taste of the tremendous energy and vitality which characterizes literary production in India today. Students will also develop a picture of the fraught place English has occupied in India from the pre-Independence period to the first decade of this century. Meets 400-level seminar requirement for the English major or the contemporary literature requirement for majors in the creative writing track, or fulfills the NW requirement. The course cannot count for more than one of the English major requirements. Permission of the instructor is required. *Mongia*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

Contemporary Speculative Fiction.
Tolkien's Mythology.
Contemporary Jewish Voices.
Caribbean Literature.

ENVIRONMENTAL SCIENCE
(See Earth and Environment)

ENVIRONMENTAL STUDIES
(See Earth and Environment)

FRENCH AND FRANCOPHONE STUDIES

Professor Carrie Landfried, Chair

L. Scott Lerner	*Arthur and Katherine Shadek Professor of Humanities and French and Italian*
Lisa Gasbarrone	*Professor of French*
Nadra Hebouche	*Associate Professor of Francophone Studies and French*
Carrie Landfried	*Associate Professor of French and Francophone Studies*
Cindy Yetter-Vassot	*Associate Professor of French*

The study of French opens the door to diverse cultures around the globe, from France itself to other French-speaking countries and regions in Europe, North and West Africa, Quebec, the Caribbean, Asia and the Pacific and Indian Oceans. French provides useful links to many parts of the world and to many areas of the liberal arts curriculum. Students interested in the arts, in government and business, in public health, environmental studies and international studies across the disciplines, benefit from the practical skills, the cultural knowledge and awareness and the intellectual connections that studying French can provide.

The Department of French and Francophone Studies offers language courses for beginners and for those who want to build on their knowledge of French. The introductory-level courses stress communicative competency and the acquisition of listening, speaking, reading and writing skills. The intermediate courses reinforce and extend those skills through an interactive exploration of contemporary French and Francophone culture using a variety of authentic print and electronic sources.

We offer a major with two tracks: **French and French Studies,** each consisting of a minimum of 10 courses.

The **French track** provides a cohesive, integrated experience which allows students to achieve an advanced level of French language proficiency as well as a solid background in literature and culture. Starting with the intermediate course sequence of 201 and 202, the major continues with two courses that engage with the French-speaking world and provide students with the tools to describe, debate, analyze and critique French literary and cultural texts, films, documents, current events, and other cultural phenomena, both orally and in writing. Students will then choose from advanced elective courses that examine an author, genre, era or theme in depth. In the final year of the major, students will complete a capstone experience at the 400-level comprising a portfolio of work they have created and a longer research project in French on a French or Francophone topic of their choice.

The French track consists of the following ten courses:

FRN 201, 202, 301 and 302

Five elective courses numbered 350 and higher or equivalent

A capstone experience (400-level)

In consultation with their advisors, majors in the French track may take one cognate course outside of the department for credit in the major. These courses are subject to departmental approval. Possible cognates draw from a number of departments and programs across the College curriculum including, but not limited to: art history, business, comparative literary studies, economics, government, history, international studies, linguistics, philosophy, and Theatre.

The **French Studies track** is designed for students with a strong interest in French and Francophone culture but may include fewer courses taught entirely in French than the French track. This track emphasizes the development of upper-intermediate level French language proficiency as well as background and insights into aspects of the French-speaking world. Starting with FRN 102, this major requires a minimum of six courses taught in French, up to three courses taught in English that focus on French and Francophone topics, and a capstone experience at the 400-level comprising a portfolio of work they have created and a longer research project in French or English on a French or Francophone topic of their choice.

The **French Studies track** consists of the following ten courses:

FRN 102, 201, 202, 301 and 302

One course numbered 350 or higher or equivalent

Three cognate courses to be identified in consultation with the major advisor

A capstone experience (400-level)

Possible cognates draw from a number of departments and programs across the College curriculum including, but not limited to: art history, business, comparative literary studies, economics, government, history, international studies, linguistics, philosophy, and theatre.

A **joint major in French** consists of the following eight courses:

FRN 201, 202, 301 and 302

Three courses numbered 350 or higher or equivalent

A capstone experience (400-level)

All French majors work closely with a departmental adviser to ensure the coherence and integrity of their major course of study.

The writing requirement in the French major is met by completion of the regular course sequence required to achieve the major.

A **minor in French** consists of six courses beyond FRN 101. A typical sequence of courses would be FRN 102, 201, 202, 301, 302 and one course numbered 350 or higher or the equivalent. Students must complete all coursework in French.

Most of our majors and minors spend a semester or year abroad. We strongly recommend this immersion experience to all of our students, believing that travel alone is not enough to learn about other cultures. Only by living, working, relaxing and even dreaming in French will students acquire an advanced command of the language and a fuller appreciation of French and Francophone culture. Students may normally transfer up to two courses per study abroad experience to their major or minor with approval of the chair.

Majors and minors in the Department of French and Francophone Studies have studied abroad in the following programs in recent years: Institute for Field Education (IFE); Institute for American Universities in Aix-en-Provence (IAU); IES Abroad Paris; IES Center and University of Nantes. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

COURSES IN FRENCH

101. Elementary French I.
For students with no previous experience with the language. An introduction to grammar, pronunciation and culture, with emphasis on developing communicative skills. No prerequisite. Offered every Fall.
Staff

102. Elementary French II.
Continuation of French 101. Prerequisite: FRN 101 or placement. *Staff*

201. Intermediate French I. (LS)
Review and expansion of French language skills. Emphasis on basic language structures, with practice in the active application of these skills to the oral and written production of French. Traditional review of grammar is supplemented by use of current audio, video and digital authentic materials. Prerequisite: FRN 102 or placement. *Staff*

202. Intermediate French II. (H)
Continuation of FRN 201. Perfection of oral, aural and written language skills. Coursework may include discussion of current events in the Francophone world, based on a variety of texts from both literary and contemporary digital and print sources. Emphasis is on developing linguistic and cultural competence. Prerequisite: FRN 201 or placement.
Staff

301. Engaging with the Francophone World I. (H) (WP)
This course is designed to help students improve oral and written expression as well as aural and textual comprehension in informal, academic, and professional settings. Analysis of model texts, targeted grammar review, and advanced stylistic practice will help students develop the skills necessary to write emails and letters, CVs, film reviews, opinion pieces, and essays. Through practice, they will learn how to engage in informal conversations, job interviews, academic debates and presentations. The use of authentic materials will teach students about contemporary issues within the French-speaking world that may include questions of transnational identity, cross-cultural partnerships and innovations, immigration and acculturation, displacement and exile. Prerequisite: FRN 202, placement or permission of the instructor.
Landfried

302. Engaging with the Francophone World II. (H)
This course introduces students to different types of French and Francophone texts. We begin by learning reading strategies and the techniques used in literary and textual analysis, then we learn to produce written and oral analyses of these texts using the forms common to French literary analysis. By the end of the course, students will be able to identify principal characteristics of major genres, write analytical commentaries on prose and poetry, and will be prepared to read unfamiliar French texts critically. Prerequisite: FRN 241, 242, 301, or the equivalent.
Yetter-Vassot

353. Environment in/and Literature. (H) (WP)
This course will investigate the intricate ways in which cultural expression reflect the relationships between human beings and their environment. We will concentrate on the principal ways in which French and Francophone literatures have dealt with the natural world (the vegetal and animal) moving from a pastoral to an allegorical, and from a colonial to a postcolonial use of the physical environment. The course will focus on the following authors: Guy de Maupassant, Jean de La Fontaine (France), Birago Diop (Senegal), Aimé Césaire, Maryse Condé (French Caribbean), and Lise Tremblay, Ying Chen (Canada). Secondary sources from philosophers such as Descartes, Kant, Rousseau, Heidegger, Bergson, Derrida, Agamben, Bailly, Glissant and Serres, will constitute the backdrop of our discussion. Prerequisite: FRN 261 or 302 or permission. *Same as ENE 353*. *Hebouche*

354. L'étranger. (H) (WP)
What does it mean to be an "étranger"? How has this term evolved over time? What do French speakers experience in other countries? We will analyze the notion of "étranger" during three historical periods (18th century exoticism, 19th century orientalism, and 20th century existentialism) before turning our attention to French speakers abroad and foreigners in France in the 21st century. Course taught in French. Prerequisite: FRN 261 or 302 or permission. *Same as LIT 354* *Landfried*

359. La France Occupée: 1940-1944. (H)
This course concentrates on the four-year German occupation of France during World War II with an emphasis on the role of the arts. We begin by exploring the ways in which artistic expression and consumption operated as acts of resistance or collaboration between 1940 and 1944. In the second half of the semester, we consider some of the literary and cinematic creations this period inspired. Prerequisite: FRN 261 or 302 or permission. *Same as LIT 359*. *Landfried*

360. Littérature Expérimentale. (H)
This course considers two literary movements that appeared in France in the wake of World War II: the Nouveau Roman (New Novel) and OuLiPo. The New Novelists reject the perpetuation of 19th-century novelistic forms, proposing new literary techniques to better reflect the modern age. Experimentation reaches a peak with OulLiPo and writers such as Georges Perec and Raymond Queneau who impose fanciful constraints on their use of language and form. Prerequisite: FRN 261 or 302 or permission.
Landfried

362. L'éducation en France: enjeux historiques et actuels. (H)
This course examines public education in France (and some of its colonies) since the Third Republic with a focus on its portrayal in contemporary literature and cinema. After a brief consideration of the historical foundations of the current French public school system, we will examine its key role in the civilizing mission of French colonization, before turning our attention to current challenges presented by France's increasingly diverse population. Prerequisite: FRN 261 or 302 or permission.
Landfried

363. Marginal Sexualities in the Maghreb. (H) (NW) (WP)
This course will explore the cultural constructions of gender and sexuality in the Maghreb, and their relationship to the concept of nation. We will also focus on new spaces of negotiation offered on the threshold of the 21st century by Francophone North African authors such as Tahar Ben Jelloun, Rachid O, Abdellah Taïa, and Assia Djebar. The course will examine concepts such as desire, fluidity, heteronormativity, homosocial vs. homosexual relationships, hypermasculinisation, discursive/rhetorical/subjective communities, and misogyny in the context of 20th/21st century North America. Prerequisite: FRN 261 or 302 or permission
Same as AFS/WGS 363. *Hebouche*

364. Francophone Literatures and Cultures (NW) (WP)
This course provides an introduction to the history and culture of at least two areas of Francophonie, such as Quebec, the Caribbean, the Maghreb, and West Africa. Through literary works, films, and other materials, the course will explore the cultural, linguistic, and political interactions between France and other Francophone countries. Prerequisite: FRN 261 or 302 or permission. *Hebouche*

366. Folk and Fairy Tales in French. (H)
Drawing on folk tales from Africa, Quebec, and the Caribbean, as well as classic fairy tales from France, we will raise questions about the nature of storytelling and the foundation of popular tales in a culture. We will examine the tales from a variety of perspectives, borrowing from psychology, anthropology, and literary criticism to form our interpretations. This popular literature will also serve as an introduction to the history and culture of various parts of the French-speaking world. Prerequisite: FRN 261 or 302 or permission *Gasbarrone*

368. French Fashion as a Reflection of French Culture. (H)
French fashion is a cultural, historical, and literary phenomenon which can be interpreted in many ways. In this course, we will study the evolution of French fashion and the French system of haute couture. We will also explore fashion such as it is represented in literature across the centuries, reading Zola's Au Bonheur de Dames, Colette's Gigi, and Les chiffons du rêve, a collection of short stories written by the granddaughter of a famous French designer. We will also look at several theories on the interpretation and meaning of fashion; fashion marketing in the 21st century; and the special relationship between France, the French and the importance of being "à la mode." Prerequisite: FRN 261 or 302 or permission.
Yetter-Vassot

369. Francophone Theatre. (H) (NW) (WP)
Francophone plays often take a head-on look at issues that originate from the socio-political contexts in which they are produced, directly and openly calling into question established structural and/or ideological systems. This course will explore the various strategies of resistance, whether aesthetic or philosophical, used by francophone dramatists from diverse backgrounds. Authors and playwrights such as Antonin Artaud, Samuel Beckett, Aimé Césaire, Jean Genet, Eugène Ionesco, and Simone Schwarz-Bart, will constitute the backdrop of our investigation. Prerequisite: FRN 261 or 302 or permission. *Hebouche*

381. Seminar: Advanced French/Francophone Studies. (H)
A seminar on a single aspect of French or Francophone culture: a writer, genre, theme or movement, seen in historical and cultural context. Prerequisite: at least one course beyond FRN 261 or 302. Recent courses include *La Littérature de Guerre;* Victor Hugo; *L'Etranger;* Monstrous Bodies; *Luxe et Elégance*. Topic for Fall 2020: *Albert Camus: Creating Dangerously*. Open to juniors who petition the department to enroll. *Staff*

391. Directed Readings in French. (H)
Tutorial for students who have completed FRN 241, 242 and 261 or 301 and 302. Students who have a special interest may arrange a tutorial with a faculty member. Enrollment is conditional on instructor's permission.
Staff

481. Seminar: Advanced French/Francophone Studies. (H)
A seminar on a single aspect of French or Francophone culture: a writer, genre, theme or movement, seen in historical and cultural context. Prerequisite: at least two courses beyond FRN 261 or 302. Recent courses include *La Littérature de Guerre;* Victor Hugo; *L'Etranger;* Monstrous Bodies; *Luxe et Elégance*. Topic for Fall 2020: *Albert Camus: Creating Dangerously*. For seniors only. *Staff*

490. Independent Study.
The student pursues an in-depth investigation of a topic of special interest, under the direction of an adviser. Available in the senior year as a Senior Research Project. Prerequisite: Permission of chairperson. *Staff*

COURSES TAUGHT IN ENGLISH

251. Magic and Mayhem in French Fairy Tales. (H)
Once upon a time, before Disney and the Brothers Grimm, Cinderella, Sleeping Beauty, Belle, and the Beast, were regular guests in the literary salons of Paris and Versailles. From Charles Perrault to Mme de Beaumont, French writers took folktales and spun them into elegant, edgy, and enduring narratives that both reflected and challenged social norms. Through close reading and analysis, we will examine these stories and their modern retellings, raising questions about narrative, gender, class, psychology, ideology, and other issues from a variety of critical perspectives. *Same as LIT 215.*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

La France occupée.
Luxe et élégance.

GEOSCIENCES
(See Earth and Environment)

GERMAN AND GERMAN STUDIES

Professor Jonathan Stone, Chair, Dept. of German, Russian & East Asian Languages

Jennifer Redmann	*Professor of German*
Curtis C. Bentzel	*Associate Professor of German*
Meagan Tripp *(on leave Spring 2023)*	*Assistant Professor of German*
James Kopf	*Adjunct Assistant Professor of German*

The study of German provides the broadening of linguistic and cultural awareness that accompanies the learning of any foreign language. In addition, knowledge of the German language and culture offers advantages in a wide range of fields. Germany plays a central role in the European Union, and a quarter of the population of the EU speaks German as a native language. Germany is the world's fourth largest exporter, one of the top three nations in research and development of high-tech and green products, and a leader in industrial, architectural, and automotive design. German is one of the top three languages used on the internet, and Germany is a leader in global book and film production. Our majors have entered fields as diverse as teaching, law, business and medicine and have used their mastery of the language to work in German-speaking countries. Students from other disciplines have taken courses in German for personal enrichment, for graduate school qualification, or for preparation in research or study in a German-speaking country.

From the first semester on, the German curriculum at Franklin & Marshall integrates German language learning with a broad knowledge and in-depth understanding of cultural production within German-speaking Europe. Students practice their oral communication skills in a variety of settings, including classroom discussions, informal conversations, and formal presentations. Over the course of the curriculum, students acquire advanced writing skills in German in multiple genres, including short argumentative and interpretive essays,

journalistic texts, and personal writing in the form of journals and letters.

German courses at all levels are organized around themes that provide students with an overview of German literature and culture. By engaging with texts (written, visual, and audio-visual), students sharpen their interpretive skills, become literate members of a German-speaking community on campus and beyond, and acquire a critical understanding of issues that have shaped German society of the past and present

Students majoring or minoring in German may pursue one of three tracks: German Language and Culture, German Literature and Culture, or German Studies. GER301, GER302, and GER450 are required courses for all majors.

Students in the German Literature and Culture track generally enter Franklin & Marshall with prior study of German. The focus of this track is development of advanced language proficiency and a thorough grounding in the major works and authors of the German literary tradition. **A major in German Literature and Culture** consists of nine courses beginning with GER 202, including at least five 400-level courses and GER 450. **A minor in German Literature and Culture** consists of six course credits in German beginning with GER 202, including at least two 400-level courses and GER 450.

Students in the German Language and Culture track generally begin their study of German at Franklin & Marshall. The focus of this track is the development of upper-intermediate to advanced German language proficiency, along with knowledge of German culture and a critical understanding of the German-speaking world. **A major in German Language and Culture** consists of nine courses from the point of placement, including at least two 400-level courses and GER 450. **A minor in German Language and Culture** consists of six course credits in German from the point of placement.

The German Studies track combines German department courses with courses in English on topics related to German culture. These may be approved Franklin & Marshall courses or courses taken in an off-campus program. Students in this track develop intermediate German language proficiency and a critical understanding of the German-speaking world from multiple disciplinary perspectives. **A major in German Studies** consists of nine courses from the point of placement and must include GER 301, 302, and 450. **A minor in German Studies** consists of six course credits from the point of placement, including up to two approved German Studies courses in English. Approved Franklin & Marshall German Studies courses include (but are not limited to) ART 335, HIS 255, MUS 231, PHI 317, and PHI 319.

German majors are strongly encouraged to spend a semester or year studying in a German-speaking country. In recent years, majors have studied abroad in the following programs: Heidelberg College program in Heidelberg, Germany; IES Berlin, Freiburg, and Vienna. See International and Off-Campus Study section of the Catalog for further information. Students majoring in German (all three tracks) may transfer no more than three courses for credit toward the major; students minoring in German (all three tracks) may transfer no more than two courses for credit toward the minor.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

COURSES IN GERMAN

101. Elementary German I. What is German?
An introduction to the question "What is German?" through topics such as family life, interpersonal interactions, and holiday traditions. Students will explore German-speaking culture through cross-cultural comparisons with the United States and by viewing and discussing classic German films of the silent era. Through communicative activities covering the four language skills (listening, speaking, reading, and writing), students learn to ask and answer questions, share information, and negotiate a variety of cultural settings. Offered every Fall. *Tripp*

102. Elementary German II. What is German?
Students expand their understanding of the question "What is German?" through topics such as daily routines, food and restaurants, fairy tales, and immigration. By reading and discussing films, short texts, and a full-length youth novel, students gain knowledge of German culture and society, improve their communicative competence, and develop skills needed to negotiate a variety of cultural settings. Prerequisite: GER 101 or placement. Offered every Spring. *Staff*

201. Intermediate German I. What is German? (LS)
Students further develop their understanding of the question "What is German?" by engaging with increasingly sophisticated texts and films on the themes of family, friendship, home, immigration, and multiculturalism. As in GER 101 and 102, all four language skills are practiced, and comparisons between American and German society provide a basis for class discussions. Prerequisite: GER 102 or placement. Offered every Fall. *Tripp*

202. Intermediate German II.
Stories of Twentieth Century Germany and the African Diaspora. (H) (WP)
In this course, students will build on the solid foundation of German they have previously acquired, sharpening their skills in the four critical areas of speaking, listening, reading, and writing. The thematic focus of the course will be the history of twentieth-century Germany with a special focus on the experiences of people of African descent in German society, including the following topics: the history of Germany in the 1920s, 1950s and today, with an emphasis on the experiences of people of African descent; children and children's literature in 20th-century Germany; famous Germans and their contributions to the realms of sport, music, art, literature in the 20th century, including prominent people of African descent; and the history of interactions between Germans and people of African descent during the age of imperialism, the Third Reich, and the years following the Second World War. Prerequisite: GER 201 or placement. Offered every Spring. *Redmann*

301. Reading German Texts and Contexts I. (H)
This course, together with GER 302, serves as an introduction to advanced courses in German literature and culture. Students undertake an in-depth study of a period of twentieth-century German culture through a variety of texts, films, and cultural artifacts. The course emphasizes the continuing development of student reading skills, interpersonal and presentational communication skills, and writing skills in multiple genres. Prerequisite: GER 202 or placement. *Tripp*

302. Reading German Texts and Contexts II. (H)
This course, together with GER 301, serves as an introduction to advanced courses in German literature and culture. The course is focused on a single theme across a number of time periods, and it stresses the central role that literature plays in fostering an understanding of German society. By reading and interpreting texts, which vary from prose and poetry to drama and film, students develop advanced reading skills and acquire the linguistic tools for textual analysis. Prerequisite: GER 301. *Staff*

451. Germans in Love. (H)
"Romantic" is probably not the first word that comes to mind when most people think about what Germans are like, but German literature is full of men and women in love. This course features novels, plays, novellas, films and lyric poetry that offer insight into whether love is, indeed, a kind of "temporary insanity," as American thinker Ambrose Bierce suggested. The course begins with an exploration of love relationships in Germany in the former GDR and the Federal Republic before and after reunification, followed by works from the nineteenth and eighteenth centuries, where social class and gender roles play a different role in constructing love relationships from the way they do in the twenty-first century. Prerequisite: GER 302. *Staff*

461. German Cinema. (H)
This course explores the history of German cinema since its origins in the 1920s. Why do black-and-white silent films like Caligari, Nosferatu, and Metropolis continue to resonate with film enthusiasts in the twenty-first century? What is so visually compelling about a Nazi propaganda film? What happened to German movie production after twelve years of misuse by Hitler's cultural ministry? What marks did the forty-year division of Germany leave on film in the united nation? How has immigration of new populations affected German film? And where, after all, are the boundaries between "global" film and "German" film today, when so many directors, actors, and studio artists work in more than one country? Prerequisite: GER302. *Staff*

462. The Meaning of Work in German Culture (H)
Are Germans as hard-working as everyone thinks? How can such a small country be a top exporter of manufactured products with workers getting at least five weeks annual vacation? This course explores how today's attitudes and practices of work in united Germany emerged from older traditions as set down in written texts, folk songs, films, and graphic arts. We examine traditional and contemporary interrelationships of work and gender, work and ethnic identity, work and social class, as well as the specific vocabulary of German work. Prerequisite: GER 302. *Redmann*

463. Contemporary German Culture (H)
This course examines a selection of topics that are part of the contemporary German cultural and political landscape, including Germany in the European Union, relations between east and west Germans, sports and German national identity, social challenges posed by Germany's aging populace, and minorities in German society. Through discussion of these issues, students explore what it means to be German today and how different groups within Germany define themselves. Students work with a wide variety of texts that range from news articles to films, film reviews, surveys, interviews, websites, and television news programs. Prerequisite: GER 302. *Staff*

464. Depictions of Women in German Literature
Freud famously asked "What do women want?" This is a question that authors of texts featuring female characters have sought time and again to answer, and their responses naturally vary widely. In this course, we focus on depictions of female characters in German-language plays, films, and prose works from across two centuries. The unifying theme of the course is the relationship of gender to sex, violence, and power, a theme that we will analyze through close readings, examination of the socio-historical context in which the work arose, and through the lens of feminist literary criticism. Prerequisite: GER 302. *Redmann*

465. German Legends and Tales. (H)
This course takes as its focus the rich tradition of fairy tales and legends that Germany has famously contributed to world literature, with a nod to the ballads that were part of its folk tradition. The course begins with a consideration of some (deceptively simple) folktales of the Brothers Grimm, organized by type. This is followed by two well-known "literary fairy tales," i.e. stories "invented" by known authors at known times. The latter part of the course is devoted to ballads and legends, principally the legend of the Nibelungen and that of Faust. Prerequisite: GER 302. *Staff*

470–479. Topics Seminar in German Literature and Culture.
A special course offering whose topic spans the centuries, genres or cultures.

490. Independent Study.
Independent study directed by the German staff. Permission of the chairperson.

INT 350. Language Precepting Seminar.
Students will develop an understanding of foreign language pedagogy and methods by collaborating with an instructor in a beginning or intermediate foreign language course at F&M. Students will discuss lesson plans and approaches with their instructor/mentors and assist learners during class time. In addition, students will meet weekly or biweekly with other preceptors in the Language Precepting course to explore theories of second language acquisition and how they inform classroom practices in foreign language courses, as well as to reflect on their own experiences as preceptors. One half credit. Permission required. *Bentzel*

COURSES IN ENGLISH TRANSLATION

162. Life and Times of German Fairy Tales. (H)
Did Disney get it wrong? In this course, we will return to the German roots of both classic and lesser-known fairy tales as we explore why fairy tales continue to fascinate audiences around the world. The cultural context of the Grimm brothers, the position of fairy tales within folklore studies, and fairy tales across cultures will be important topics in the course. Class members will also learn about various modes of literary analysis by applying them to the Grimms' tales. We will conclude the course by discussing animated fairy tale films by Walt Disney with an eye to how Disney transformed the Grimms' tales to appeal to 20th-century American audiences. The course will be discussion-based, and students will write response papers and interpretative analyses of fairy tales. Class members will also write and present their own original fairy tales. *Same as LIT 162.* *Redmann*

235. Destroying Images. (A)
Defacement, destruction, removal, erasure: all are forms of iconoclasm, or "image-breaking." This course is designed to help you make sense of the diverse manifestations of physical assaults on inanimate objects, historically and in the present-day, as the arena in which colliding cultural, political, and social beliefs are exposed. Although we devote the last portion of the course on image-destruction after the election of Barack Obama and in the wake of Black Lives Matter, we begin with the historical and conceptual foundations for image destruction as a social practice found across time and cultures. Exploring the social, cultural, and political investment we place in material objects, we aim to answer the following question: why do we believe that ideas (and in some cases people) live in inanimate objects? *Same as ART/RST 235.* *Aleci*

255. Dictatorship, Division, and Democracy in Modern German History. (S)
Focuses on continuities and ruptures in German society during the Second Empire, the Weimar Republic, National Socialism, the competing Republics, and the (unified) Federal Republic of Germany. Major questions include German industrial and state formation; gender, class, and religious identities; the impact of total war; economic and political crisis; the roots of dictatorship and democracy; the organization of genocide; and European unity. *Same as HIS 255.* *Mitchell*

450. German Capstone Seminar. (H)
This course is intended to prepare German majors to conduct research and write formal literary analyses on literary topics. Since the course focuses on writing in English, students read important longer works from the German literary tradition in English translation, along with secondary literature in English. The course also gives students a summary overview of the major periods of German literary and intellectual history. Equally importantly, students have the opportunity to develop their writing skills in literary analysis. Each student prepares a significant research project on a longer work of German literature of their choosing and presents a formal presentation 6on this work at the end of the semester. Prerequisite: Senior standing, or LIT 201. *Bentzel*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Language Matters in German Culture.
Reading Berlin.
Business in Germany.
Song Cycles and Concept Albums.

GOVERNMENT

Professor Stephanie McNulty, Chair

Dean C. Hammer (Fall 2022 only)	*John W. Wetzel Professor of Classics and Professor of Government*
Stephen K. Medvic	*The Hon. and Mrs. John C. Kunkel Professor of Government*
Susan Dicklitch-Nelson (on leave Fall 2022)	*Professor of Government*
Jennifer D. Kibbe	*Professor of Government*
Stephanie L. McNulty	*Professor of Government*
Matthew M. Schousen	*Professor of Government*
David Ciuk (on leave Fall 2022)	*Associate Professor of Government*
Biko Koenig	*Assistant Professor of Government*
Jennifer Meyer (on leave 2022-23)	*Assistant Professor of Government and Public Health*
Elspeth Wilson	*Assistant Professor of Government*
Wei-Ting Yen (on leave 2022-23)	*Assistant Professor of Government*
Prithviraj Datta	*Visiting Assistant Professor of Government*
Stefanie Kasparek	*Visiting Assistant Professor of Government*
Hollie Tripp	*Visiting Assistant Professor of Government and Public Health*

Students in Government study the processes by which societies make collective decisions, explore the theoretical and ethical foundations of political action, raise critical questions about the nature and use of power, and examine how societies and international systems attempt to address basic problems of liberty, equality and order. As a complement to coursework in the major, students develop skills in language, economics, mathematics or philosophy.

The Government major is designed to prepare and enrich students for their professional lives and their roles as active citizens and leaders. The department has a long tradition of encouraging its majors to think conceptually about politics and to immerse themselves in their political environment through internships, civic activism, study abroad and community-based learning.

A major in Government consists of ten courses in Government and a three course Cognate. At least nine (9) of the Government courses, including the 400-level seminar, must be completed at Franklin & Marshall College. Requirements are:

GOV 100;

GOV 120;

GOV 130;

GOV 241 or 242;

GOV 250;

four electives, of which at least two must be at the 300-level or above;

one 400-level Government seminar.

Also required is the completion of one of the following Cognates:

PHI (three courses, at least two of which must be at the 200-level or higher);

MAT (any three courses not counting 105 or 116);

Foreign Language (three courses in a new language or three courses beginning where the student is placed);

ECO (100, 103, plus any 200-level course); or

One full semester of study abroad at a College-approved program.

Prospective majors are encouraged to begin planning for the major by the first semester of their sophomore year. To declare a major, students must have taken at least one Government course and have taken or are planning to take one Cognate course by the first semester of junior year. GOV 250 should be completed no later than the first semester of the junior year.

Students considering study abroad should contact the Office of International Programs.

For students completing the Government major, BIO 210, ECO 210, BOS 250, PSY 230 or SOC 302 may be substituted for GOV 250.

Students intending to major in both Public Health and Government may not apply more than three Government courses toward the second major.

To be considered for honors in Government, students must have a major GPA of at least 3.50 at the end of their seventh semester, complete a two-semester Independent Study project and defend it in an oral exam. The project must include an original argument that is placed in the context of other scholarship. An award of honors will be made by the committee for projects that demonstrate originality, intellectual engagement and depth of understanding of the topic.

Please note as well, that the numbering system for Government courses corresponds to the following subfield divisions: x00–x19 (American Politics); x20–x29 (Comparative Government); x30–x39 (International Relations); x40–x49 (Political Theory); x50–x59 (Political Research).

Majors in Government have participated in the following off-campus study programs in recent years: Washington semester, American University, Washington, D.C.; Butler University and other programs in London and Oxford, UK; Parliamentary Internship program at the University of Edinburgh, Scotland; International Education of Students (IES) in Barcelona, Spain and Buenos Aires, Argentina; School for International Training (SIT) in Amsterdam, Jordan, Kenya, and Australia. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in

Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

100. American Government. (S)
Political power within the framework of American national government. Current governmental and political problems are explored.
Ciuk, Koenig, Medvic, Schousen, Wilson, Staff

120. Comparative Politics. (S)
Introduction to the theory and method of comparative politics. The course analyzes the government and politics of both developed and developing countries, encouraging students to apply the comparative method to draw conclusions about political processes and phenomena across nations and continents. *Dicklitch-Nelson, McNulty, Yen*

130. International Politics. (S)
The theory and practice of international politics; the major actors in the international system and their various objectives; the interplay of power and principle in diplomacy; the causes of war and the prospects for peace. Theoretical principles are illustrated with case studies from various historical periods with emphasis on the major conflicts since World War I.
Kasparek, Kibbe

200. Introduction to Public Policy. (S)
Focus on government activity in a variety of public policy areas, the structural and political contexts of debates over alternative policy strategies and approaches to understanding public policy, with an emphasis on the American system. Policy areas examined include the national budget and entitlements, science and technology and education. Prerequisite: GOV 100 or GOV 120 or PBH 251. *Same as PUB 200*.
Koenig, Tripp, Staff

208. The American Presidency. (S)
Evolution of the Presidency to an office that is the focal point of politics and leadership in the American political system. Emphasis on the constitutional and political roles played by the chief executive in shaping public policy. Prerequisite: GOV 100. *Schousen*

219. City and State Government. (S)
This course will focus on the interrelationships between the political, historical, legal, economic, social and demographic aspects of governing cities. In addition, the relationship of state governments to city governments will be explored in some depth. Particular attention will be paid to the problems facing cities, and possible solutions to those problems will be discussed. Among the many issues we will examine will be the ways in which state governments can be of assistance to city governments. Prerequisite: GOV 100. *Staff*

241. Classical Political Theory. (H)
Examines important texts in classical Greek and Roman political thought, including the writings of Plato, Aristotle and other relevant authors. Explores how ancient political theory sheds light on contemporary politics, including issues of democracy, citizenship, globalization and international relations. *Hammer*

242. Modern Political Theory. (H)
Examines the political theories of Machiavelli, Hobbes, Locke, Rousseau, Marx, and Mill, with emphasis on alternative views of the social contract, inequality, and freedom. *Datta*

250. Political Research. (S)
Empirical investigation in political science; scientific inquiry in political science; problems of logical induction; selecting and formulating a research problem; functions and types of research design; analysis of data, both qualitative and quantitative. Primarily for government majors; should be completed no later than the first semester of junior year. Prerequisite: GOV 100, 120, or 130. *Ciuk, Kasparek, Medvic, Schousen, Yost*

305. Public Policy Analysis. (S)
This upper-level course in public policy focuses on three core goals: understanding how policy is implemented after it becomes law, learning how to assess and analyze the state of a given set of public policies, and understanding the institutional landscape of the policy making and implementation process. We are most concerned with what happens after a bill becomes a law—how policy is interpreted, enforced, changed, or ignored over time. Policy makers would do well to pay attention to the life of a policy after it leaves the Executive's desk, as this is when the real work of the policy comes to life. This class will concentrate on policy issues in the U.S., and includes a major student project. Prerequisite: GOV 100. *Same as PUB 305*. *Koenig, Tripp*

309. The U.S. Congress. (S)
The informal and formal institutions and processes of the United States Congress, with specific attention to selected public policy issues. Prerequisite: GOV 100. *Schousen*

310. American Campaigns and Elections. (S)
Explores the structure of American campaigns and elections, including the nomination process and general elections. Gives special attention to the elements of the modern campaign, including campaign finance, research, polling, advertising and media use. Prerequisite: GOV 100. *Medvic*

314. The American Constitution. (S)
Examines the Supreme Court as a political institution and custodian of the governmental system. Prerequisite: GOV 100. *Wilson*

315. Civil Rights and Civil Liberties. (S)
Explores civil rights and liberties in the American system, with emphasis on current problems and recent Court decisions. Prerequisite: GOV 100.
Wilson

317. Trial Courts and the Justice System. (S)
Examines courts at the trial level, including organization of the judiciary, the selection of judges, the relationship between the public and the courts and the role of trial courts in administering justice in different contexts. Prerequisite: GOV 100. *Staff*

318. Media and Politics. (S)
Examines the role of the mass media (including print, broadcast, and new media) in American politics, giving particular attention to the ways in which the media both influence and are influenced by political actors and the political process. Prerequisite: GOV 100. *Same as TDF 318*. *Medvic*

320. International Environmental Law.
This course examines principles and instruments of International Environmental Law (IEL), beginning with the nature and sources of IEL and an introduction to the key actors and agencies involved in global environmental governance. Focusing on the development of regimes addressing a range of environmental issues, the course also addresses implementation and state responsibility for environmental harm and dispute resolution. Topics explored include climate change and atmospheric pollution; the law of the sea and protection of the marine environment; international regulation of toxic substances; conservation of nature, ecosystems and biodiversity; and the intersection of international trade and environmental protection. Students will examine treaties and case law first-hand, and represent vested interests in a simulated negotiation of a multilateral environmental agreement. Prerequisite: ENE 216 or GOV 200. *Same as ENE 320*. *De Santo*

324. Asian Politics. (NW) (S) (WP)
This course introduces students to the domestic and international politics of China, Japan, and the two Koreas. *Yen*

326. African Politics. (NW) (S) (WP)
An exploration of the socio-economic and political challenges facing Sub-Saharan Africa since independence. This course will focus specifically on the prospects for socio-economic development and democracy in Sub-Saharan Africa. Students will engage in a Reacting to the Past (RTTP) simulation. Prerequisite: GOV 120. *Same as AFS 326*. *Dicklitch-Nelson*

327. Latin American Politics. (NW) (S) (WP)
This course introduces students to Latin American government and politics. The course provides a brief overview of the region's history and a discussion of some of the key issues shaping the region's politics, including: authoritarianism and democracy; development and dependency; and revolution and inequality. The course includes a survey of the politics of several countries from different areas of Latin America. *Same as IST 327*. *McNulty*

330. U.S. Foreign Policy Analysis. (S)
Explores how U.S. foreign policy is made. Examines the roles played by the foreign affairs bureaucracy, Congress, public opinion, the media and individual policy makers in shaping foreign policy and then applies that information in analyzing past and present foreign policy decisions. *Kibbe*

352. Global Justice. (H) (WP)
This course focuses on key ethical issues in international politics, with special emphasis on the question of what demands justice imposes on institutions and agents acting in a global context. In addition to theoretical approaches to global justice, we will also read and discuss what justice requires in relation to five issues of international concern–poverty, climate change, immigration, warfare, and democracy. *Datta*

374. Global Environmental Politics. (S) (WP)
Analysis of environmental problem definition and policy solutions in different countries, with particular focus on the developing world. Effects of political drivers of air and water pollution, land cover change, and biodiversity conservation. Influence of political structures, power relations, cultural values, ecological dynamics, and social interactions on environmental politics. Roles of national and multilateral institutions, NGOs, and civil society in policy debates. Outcomes of multi-stakeholder negotiations over environmental governance of global commons, including North-South disputes. Counts as Human Environment core course for Environmental Studies. Prerequisite: ENE/ENV 216 or permission of instructor. *Same as ENE 314*.
Bratman, Cann, De Santo

380. Health Policy. (S)
This course investigates domestic and global health policy issues. We will survey health care and health systems, focusing on health care spending, insurance, and health outcomes. Students will also examine ethical dilemmas and debates within health policy. We will ask what role health policy can play in addressing health disparities. Two questions infuse our deliberations: what can the government do to shape the health of individuals and what should it do? Formerly GOV/PBH 410. *Same as PBH 380*. *Meyer, Tripp*

390. Independent Study.
Independent study directed by the Government staff. Permission of chair.

391. Directed Reading. (S)
Exploration of a chosen topic in government, with reading directed by Government department staff. Assignments are typically short analytical papers. Permission of chair.

411. Presidential Character. (S)
This course examines the role that individual politicians, particularly American presidents, play in American politics. We examine concepts such as presidential leadership and presidential character. A primary goal of the course is to understand what types of individuals are likely to become president and which individual traits successful presidents are likely to possess. *Schousen*

412. Political Parties and Polarization in the United States. (S)
This seminar is designed to explore issues related to party politics, particularly in the United States but with some comparison to party systems in other democracies. Students will explore the role of parties in democratic systems of government and the history of parties in the United States. The majority of the semester will be spent examining the causes and consequences of partisan polarization. After completing the course, students should have a better understanding, from both a normative and empirical perspective, of the influence of parties in the American political system. *Medvic*

420. Secrets, Spies, Satellites. (S)
This seminar highlights some of the major debates about the role, practices and problems of national intelligence and explores the issues facing the U.S. intelligence community in the 21st century. Topics include the role intelligence plays in support of policymaking, the sources of past intelligence "failures," and the questions of congressional oversight and intelligence reform. *Kibbe*

425. Human Rights-Human Wrongs. (NW) (S)
This course is a senior seminar course on human rights. Students will be introduced to the theory and practice of human rights through the examination of human rights documents, key theoretical readings in the field and special guest lectures by human rights activists. A major component of this course will involve community-based learning (CBL). Students, working with attorneys, will be required to work on a asylum, Withholding of Removal, or Convention Against Torture (CAT) case. Students will work in teams of three. *Dicklitch-Nelson*

428. The Politics of Development.
This course explores the theory and practice of international development, with an emphasis on political dynamics. The course begins with an overview of the most well-known and debated theories of development, such as modernization and dependency theories. We then discuss the politics of foreign aid and humanitarian assistance. Finally, the course explores several topics that are important to this area of study, such as gender, ethno-development, and participatory development. While not excluding other regions of the world, the course has a strong emphasis on the politics of development in Latin America. *McNulty*

445. Hannah Arendt.
This seminar explores the life and work of Hannah Arendt, who remains one of the most controversial and important political thinkers of the 20th century. Examines how her personal experience as a Jewish émigré extended to an exploration of identity, to a critique of contemporary culture and politics and to a revived sense of politics that emphasizes human distinctiveness rather than anonymous group processes. *Hammer*

450. Political Psychology.
Political psychology, as an interdisciplinary pursuit, applies psychological concepts and methods to test theories about elite and mass political behavior. In essence, political psychologists go "inside the mind" of elites and members of the mass public to explain various aspects of political behavior. Class topics include attitude formation, organization, and recall; cognition and information processing; values and ideology; emotion; personality; ethnocentrism; authoritarianism; and polarization. *Ciuk*

490. Independent Study.
Independent study directed by the Government staff. Permission of chair.

300 LEVEL TOPICS COURSES EXPECTED TO BE OFFERED IN 2021–2022

Fall 2022
Politics of the European Union (Kasparek)

Spring 2023
Putin's Russia (Schrader)
Global LGBTQ+ Human Rights (Dicklitch-Nelson)

SENIOR SEMINARS EXPECTED TO BE OFFERED IN 2022–2023

Fall 2022
Hannah Arendt (Hammer)
Presidential Character (Schousen)

Spring 2023
Political Theory and Racial Injustice (Datta)
Global Environmental Health (Meyer)
Secrets, Spies and Satellites (Kibbe)
Politics of the Trump Era (Koenig)

HISTORY

Professor Abby Schrader, Chair

Professor Ted Pearson, Associate Chair

Douglas A. Anthony	*Professor of History*
Van Gosse	*Professor of History*
Benjamin McRee (on leave Spring 2023)	*Professor of History*
Maria D. Mitchell (on leave 2022-23)	*Professor of History*
Richard Reitan (on leave Fall 2022)	*Professor of History*
Abby M. Schrader	*Professor of History*
Louise L. Stevenson	*Professor of History and American Studies*
Ted Pearson	*Associate Professor of History*
Laura Shelton (on leave Spring 2023)	*Associate Professor of History*
Sotirios Dimitriadis	*Adjunct Assistant Professor of History*

A major in History provides students with a broad understanding of long-term historical trends in 100-level survey courses; more in-depth knowledge of regions, countries, and issues in 200-level topics courses; an appreciation for historiography and the practices of history in the methodology course (HIS 260); intensive study and discussion in 300-level readings courses; and, finally, guidance in integrating all these components of the major with research, presentation, and writing skills in 400-level seminars. The History Department is committed to ensuring that its students emerge from Franklin & Marshall with a well-rounded history education that incorporates strong emphasis on regional distribution. It is also committed to the goals of internationalizing the curriculum and to this end encourages its majors and minors to study foreign languages and pursue academic work abroad.

A major in History consists of 10 courses. These courses must include HIS 260 (History Workshop: Methods and Practice), which should be taken during the sophomore or junior year unless permission is given by the Chair to take it at some other time; two seminars or one seminar and one Independent Study Course (HIS 490); and at least three additional courses at the 300- or 400-levels, only one of which may be a Directed Readings Course (HIS 390). A student may count toward the major one course taken at F&M but outside of the department with prior approval by his/her adviser. This course must be at the 300- or 400-level in its home department and complement the student's course of study. The course will be counted as a 300-level course; it cannot fulfill a distribution requirement. History majors must fulfill a distribution requirement by taking two courses in each of the following areas: United States (designated U), European (designated E), and World (Latin American, African, Islamic, and Asian) history (designated WH), two of which must be pre-modern (designated PM). In most cases, majors must take at least five history courses at Franklin & Marshall.

A minor in History consists of at least six courses. These courses must include HIS 260 (History Workshop: Methods and Practice), which should be taken during the sophomore or junior year unless permission is given by the Chair to take it at some other time; one seminar; and two additional courses at the 300-level. History minors must fulfill a distribution requirement by taking one course in two of the following areas—United States (U), European (E), and World (Latin American, African, Islamic, and Asian) history (WH)—one of which must be designated pre-modern (PM). In most cases, minors must take at least four history courses at Franklin & Marshall.

A Joint Major in History consists of at least eight courses. These courses must include HIS 260 (History Workshop: Methods and Practice), which should be taken during the sophomore or junior year unless permission is given by the Chair to take it at some other time; two seminars or one seminar and one Independent Study Course (HIS 490); and at least two additional courses at the 300- or 400-levels, only one of which may be a Directed Readings Course (HIS 390). Joint Majors must fulfill a distribution requirement by taking one course in each of the following areas: United States (designated U), European (designated E), and World (Latin American, African, Islamic, and Asian) history (designated WH), one of which must be pre-modern (designated PM).

Students should consult with their academic adviser or the History Department Chair for questions concerning requirements for the major/minor.

The writing requirement in the History major is met by completion of the normal courses required for the major.

History majors are advised that command of at least one foreign language is important for those who plan to do graduate work in history.

Majors in the Department of History are strongly encouraged to study abroad because personal familiarity with foreign cultures is increasingly useful in an ever more interconnected world. Students interested in off-campus study should meet with their academic adviser or the History Department chairperson as early as possible. Typically, students will receive History credit at the 200- or 300-level for courses that they take abroad; these courses will often fulfill other distributional requirements. Those students considering study abroad during their entire junior year must take the History Workshop (HIS 260) by the second semester of their sophomore year at the College.

Majors and minors in the History Department have studied abroad in the following programs in recent years: F&M in Tuscany; IFSA-Butler National University of Ireland, Galway; IFSA-Butler Summer Language and Culture Program at Universidad de Buenos Aires; SIT Study Abroad Peru; SU Abroad Florence, Italy; IES Abroad Vienna; and Advanced Studies in England. See the International and Off-Campus Study section of the Catalog for further information.

To be eligible for consideration for honors in History, students must have a grade point average of no less than 3.3 in the major and must complete a significant research project that is deemed outstanding by the review board constituted by the student and his or her adviser. Students interested in standing for honors in History are encouraged to consult with the department chairperson as early as possible.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities;

(S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (PM) departmental Pre-Modern History requirement; (U) departmental United States History requirement; (WH) departmental World History requirement; (WP) World Perspectives requirement.

SURVEY COURSES

Courses in this group are open to all students.

113. The History of Ancient Greece. (S) (E) (PM)
Ancient Greece from the Bronze Age to the death of Alexander the Great in the Mediterranean and Near Eastern context. Students are also introduced to the problems and methods of historical inquiry. *Same as CLS 113.* *Castor*

114. The History of Ancient Rome. (S) (E) (PM)
The transformation from the Republic to Principate and the collapse of the empire are explored. Students are also introduced to the problems and methods of historical inquiry. *Same as CLS 114.* *Castor*

115. The Middle Ages. (S) (E) (PM)
The history of western Europe from the decline of the Roman Empire to the beginning of the 16th century. Emphasizes traditional themes such as monasticism, the development of feudal relations, and the conflict between church and state as well as other topics, including popular religion, the impact of disease, and the life of the peasantry. *McRee*

117. Early Modern Europe. (S) (E) (PM)
First traces the development of Renaissance ideas and political institutions, followed by a consideration of the religious and social changes in western Europe down to 1648. Topics explored include Renaissance humanism, the growth of monarchical power, and the Protestant Reformation.*McRee*

121. Race, Revolution, and Reform: Europe in a Globalized 19th Century. (S) (E)
Frames the Enlightenment, industrial revolutions, the French Revolution, 1848 revolutions, the Crimean War, wars of national unification, the Dreyfus Affair, and colonial conquest within a global context with emphasis on themes of nationalism, Liberalism, Marxism, gendered spheres, modern racism, sexuality, and empire. *Mitchell*

122. Revolution, Dictatorship, and Death: Europe in the 20th-Century World (S) (E)
Frames the First World War, Russian Revolution, National Socialism, Second World War, Holocaust, Cold War, decolonization, immigration, European unity, 1968 movements, 1989 revolutions, and Yugoslav wars within a global context with emphasis on themes of democracy, socialism/communism, fascism, nationalism, racism, gender and sexual identity, and postwar reconciliation. *Mitchell*

125. Imperial Russian History. (S) (WP) (E) (PM)
Examines Russian history from Muscovite period through early 20th century, emphasizing interaction of state and society and how social, political, economic, and cultural events influenced tsarist policies, imperial expansion, and efforts to reform and revolutionize Russian life. *Schrader*

126. Russia in Revolution from Lenin to Putin. (S) (E)
Covers major historical developments in Russia and the Soviet Union from revolutionary era of 1905 to the present. Traces evolution of new political, social, and cultural identities and re-formulation and dismantling of old ones during the Soviet era and beyond. *Schrader*

127. History of the Islamic World to the 18th Century. (NW) (S) (WP) (WH) (PM)
Examines the history of the Islamic world from the rise of Islam through the early modern period (circa 1800 CE), with a focus on the emergence and evolution of Muslim institutions, the material culture of Muslim societies, and the major political and social changes that have shaped the Islamic world. *Dimitriadis*

128. The Making of the Modern Middle East. (NW) (S) (WP) (WH)
Introduction to the history of the Middle East (including Iran and Turkey) from the late 18th century to the present. Focuses on colonialism, the rise of nationalism, and the major ideologies that have mobilized communities across the region. *Dimitriadis*

131. History of Colonial Latin America: From Contact to Revolution (NW) (S) (WH) (PM)
Survey of Latin America from pre-Conquest times to the present. Begins with historical backgrounds of indigenous societies as well as Spain, Portugal, and Africa before 1492, followed by an examination of the conquest and colonial period through independence. The course focuses on the contributions of these major cultural groups in the formation of colonial Latin American society and culture. *Shelton*

132. Latin America and Its People: Revolution and Modernity (NW) (S) (WH)
Focuses on comparative history and political economy, U.S.-Latin American relations, and cultural forces. The course introduces students to the major trends, problems, and forces that have shaped current-day Latin American societies since the late colonial period. A focus on case studies is complemented by an examination of broad patterns of change in Latin America as a whole. *Shelton*

136. U.S. Empire. (S) (U)
From the Mexican War through World War II (1845–1945) the U.S. developed the intellectual and diplomatic arguments of empire while acquiring the territory necessary for achieving global predominance. This course examines this rise to world power, including territorial expansion, European diplomacy, world wars and the exertion of influence into Mexico from a historical perspective that includes both critics and supporters of U.S. world involvement. *Same as AMS 136.* *Stevenson*

137. American History, 1491–1865. (S) (U)
Traces development of North America from the European encounter with the continent in 1490s to end of American Civil War. Examines colonization and its impact on the region's indigenous peoples; the evolution of free and unfree labor systems; the causes, events, and consequences of the American Revolution; and the continental expansion of the New Republic. Concludes by examining political and cultural tensions between north and south, the rise of the Abolition movement, the Civil War, the revolution of Emancipation, and the first years of Reconstruction. *Pearson*

138. The United States and the Modern World. (S) (U)
Traces the evolution of the United States since the Civil War, as an urban, industrial society marked by deep racial and ethnic cleavages. Besides studying movements and legal struggles for equality, it examines America's role in the world, from intervention in Latin America through two world wars, the Cold War, and Vietnam. Students can expect to use primary documents and engage in debates. *Gosse*

141. History of North and West Africa. (NW) (S) ((WP) WH)
Introduction to major themes in the history of North and West Africa from ancient Egypt through the present crisis in Sudan. Emphasis falls on West African political and social formations, domestic and trans-Atlantic slave systems, notions of identity, the role of Islam, and the rise and fall of colonialism. Students use primary sources to explore historical problems. *Same as AFS 141.* *Anthony*

142. History of East and Southern Africa. (NW) (S) (WP) (WH)
Introduction to major themes in the history of East, Central, and Southern Africa from the Bantu migration through the Rwandan genocide. Emphasis falls on social, political, and religious change in pre-colonial Africa and resistance to slavery and colonialism. Students use primary sources to explore historical problems. Final unit explores the legacy of colonialism in the 1994 Rwandan genocide. *Same as AFS 142.* *Anthony*

149. Africa and the Black World: Concepts and Context. (NW) (S)
Explores the emergence of continental ("African") and racial ("Black") identities with particular emphasis on the roles of the trans-Atlantic slave trade, the rise of racial thought in Europe and the Americas, and the impact of European imperialism. *Same as AFS 149.* *Anthony*

151. Premodern East Asian History. (NW) (S) (WP) (WH) (PM)
Historical introduction to various cultures of East Asia, from ancient archeological records to early 17th century with geographical focus on the region encompassing present-day China, Korea, and Japan. Provides students with basic literacy in key developments in East Asian history and encourages students to critically assess this history through the themes of culture and progress. No prior background on East Asia is required.
Reitan

152. Modern East Asian History. (NW) (S) (WP) (WH)
Provides an introduction to the cultures of East Asia (China, Japan, and to a lesser extent, Korea) from the 17th century to the present through themes of identity, change, and conflict. Throughout, we will focus our attention not only on diplomatic events and on the thought and actions of elite or dominant groups, but also on those marginalized on the basis of race, class, religion, gender, and so forth. *Reitan*

153. Premodern Jewish History:
Jews of East and West through the Middle Ages. (NW) (S) (PM) (WH)
Introduction to Jewish history, beginning with first centuries of the Common Era and continuing to end of 17th century. Examines central themes and patterns in Jewish history with focus on the development of major Jewish communities in Christian Europe and the Arab/Muslim world. Course looks at relationships between Jewish and non-Jewish cultures and communities during this time.*Same as JST/RST 153*.
Staff

154. Jews in the Modern World. (S) (E)
Introduction to the modern era from late 18th century Emancipation and Enlightenment through the mid-20th century, tracing the transformations of Jewish life. Broad historical sketches are combined with close readings of particular texts, movements, and thinkers to flesh out the contours and dynamics of the Jewish experience in the modern world. Major events of Jewish history of 20th century (the Holocaust, foundation of the State of Israel, and mass migration of European Jews to the Americas) are examined through secondary and primary sources. *Same as JST/RST 154*.
Staff

TOPICS COURSES (200-LEVEL)

233. African American History. (S) (U)
An advanced course tracing the progress of African Americans from slavery to freedom, beginning in the larger Atlantic world of the 17th and 18th centuries, and continuing through the American Revolution, the battle against slavery culminating in the Civil War, and the struggle for black citizenship between the Reconstruction of 1865–1877 and the "long civil rights movement" of the 20th century. *Same as AFS 233*.
Gosse, Pearson

235. U.S.-Mexico Borderlands. (NW) (S) (WH)
This course introduces students to the history of the present-day U.S.-Mexico border region. Although much of the course focuses on the past 150 years, we will also explore how early indigenous peoples lived in the region and interacted with the environment, and examine the legacy of colonialism in the region prior to the U.S.-Mexico War.
Same as AMS 235. *Shelton*

250. Imperialism and Revolution in Modern China. (S) (NW) (WH)
Provides an introduction to the modern history of China from the final years of Qianlong's reign at the close of the 18th century to the People's Republic today. Through themes of control and dissent, we address China's struggle against imperialist aggression during the 19th century; revolution and domestic change within China; the emergence of nationalist control under the Guomindang; the victory of communist forces in 1949; and the many domestic and international pressures facing the People's Republic today. *Reitan*

255. Dictatorship, Division, and Democracy in Modern German History. (S) (E)
Focuses on continuities and ruptures in German society during the Second Empire, the Weimar Republic, National Socialism, the competing Republics, and the (unified) Federal Republic of Germany. Major questions include German industrial and state formation; gender, class, and religious identities; the impact of total war; economic and political crisis; the roots of dictatorship and democracy; the organization of genocide; and European unity. *Same as GST 255*. *Mitchell*

260. History Workshop: Methods and Practice.
Trains students in the methodology and practice of history, in preparation for seminar research and reading and the scholarly practice of history. The two principal objectives of the History Workshop are "historiographical literacy" (a reasonably comprehensive grasp of historical approaches, methodologies, and schools of analysis) and learning the "mechanics of doing history" (how to research and write history, including ethical and practical issues of archival work, library and web use, the mechanics of citation, and more). Classes center on critical analysis of readings, textual interpretation of primary documents, and library activities. Open to all students, but priority is granted to majors and minors. Should be taken during the sophomore or junior year. *Pearson, Reitan, Schrader, Shelton*

282. Vietnam and the Cold War. (S) (WP) (U)
This course examines the longest armed conflict in our history, the Vietnamese-American War that began in 1946, when the United States began aiding the French effort to take back control of their colony in Indochina, and ended with U.S. defeat in 1975. It places that conflict in the larger context of national liberation in the Third World (the formerly colonial regions of Africa, Asia, and Latin America). *Same as AMS282*.
Gosse

READINGS COURSES (300-LEVEL)

310. American Masculinities. (S) (U)
Explores the importance of masculinity and its various constructions in American history and the contemporary period. We begin by examining the theoretical and historical foundations of American masculinities. We will focus on key ways in which men (and women) sustain and recreate masculinities. Topics include manhood and the workplace, politics, sports, courtship, fatherhood, military, immigration and ethnicity, crime and prisons, and religion. *Same as AMS/WGS 310*. *Deslippe*

311. History of Medicine. (S) (U) (NSP)
The history of medicine with particular attention to American medicine. The relationship between medicine and society is studied in its historical context. We look in detail at some trends in modern medicine and the current debate over national health care policy in light of the history of medicine. *Same as STS 311*. *Strick*

312. Environmental History. (S)
Examination of various approaches to environmental and ecological history. Focuses on ways in which the physical and biological world have affected human history and on ways in which human social and political organization, economic activities, cultural values and scientific theories have shaped our alteration and conservation of nature. Selected case studies from environmental and ecological history, with emphasis on the 17th through the 20th centuries. *Same as ENE/STS 312*. *Strick*

314. Reproductive Health and Justice in Latin American History. (S) (WP) (WH)
This course examines the history of reproductive health and the emergence of reproductive rights and justice movements in Latin America from the colonial period to the present. It explores how the practices of reproductive health, the intersections between sexuality and reproduction, and the professions of midwifery and obstetrics changed over time. The central themes of the course include birth control, maternal and infant mortality, sexually-transmitted diseases, family planning, and reproductive health policy, but with particular attention to Latin American gender systems and the region's cultural and ethnic diversity. *Same as PBH 314*. *Shelton*

315. The End of the Middle Ages. (S) (E) (PM)
During the 14th and 15th centuries western Europeans experienced a series of calamities: overpopulation and food shortages, protracted military struggles, and, most notably, the Black Death. Europeans also witnessed new challenges to papal authority, religious orthodoxy, and established patterns of intellectual discourse. In this course we will examine those developments, the ways in which people of the time responded to them, and the impact they had on European society, economy, politics, and culture. *McRee*

316. Tudor-Stuart England. (S) (E) (PM)
English history from the coming of the Tudors in 1485 to the "Glorious Revolution" 1688–89. Particular attention will be devoted to the religious reformations of the 16th century, the civil war and political upheavals of the 17th century, and the effects that both developments had on the lives of English men and women. *McRee*

318. Environmental History of Latin America. (NW) (S) (WH)
This course will examine the intersections of human history and culture with environmental change in Latin America from the early colonial period to the present. The major themes include the consequences and significance of the Colombian Exchange, the roles of religion and culture in shaping human relationships with nature, the development of export-led agriculture, urbanization, and the emergence of diverse environmental movements within Latin America. We will explore the origins of major environmental problems and the ways people have responded to these challenges. The course will also address how historians have approached the study of the environment. *Same as ENE 318.* *Shelton*

319. Making Sense of Putin's Russia: From Perestroika to Presidential Election Tampering. (S) (E)
This course will explore these issues by examining the factors leading up to the collapse of the Soviet Union: Gorbachev's attempts to reinvigorate the system economically and politically through his policies of perestroika and glasnost' that ended with the collapse of the Berlin Wall and breakup of the Soviet Union; the creation of the present-day Russian regime under Yeltsin, whose close ties to the oligarchs helped usher in an era of unprecedented corruption and the emergence of the Russian mafiya; and the change in leadership from Yeltsin to Vladimir Putin, whose crackdown on democratic institutions like the free press and civil liberties and whose Cold-War-era style posturing alarms the West and has stoked the beginnings of grass-roots opposition movements (and ruthless crackdown against them) at home. In addition to lecture and discussion of common readings, students will do presentations of focused topics that they will then turn into final papers for the course. *Same as IST/RUS 319.* *Schrader*

320. American Women and Social Movements Since 1900. (S) (U)
An interdisciplinary study of the various ways women have participated in American society and politics. Topics include the suffrage movement, modern modes of political participation, and the New Deal and World War II. Critical analysis of the meaning of feminism and special attention to the post-1945 period. *Same as AMS/WGS 320.* *Deslippe*

323. Cuba and the United States: The Closest of Strangers. (S)
This course examines the long history of relations between North Americans and Cubans, two peoples separated by only 90 miles. Our topics will range from baseball to guerrilla warfare, from the Mambo to the Missile Crisis. This history includes a shared commitment to anticolonial liberation; annexationist schemes among Southern slaveholders; repeated military interventions by the United States; solidarity from the U.S. with various Cuban Revolutions, including but not limited to Fidel Castro's; and two hundred years of cultural contact between African Americans and Afro-Cubans that has profoundly influenced U.S. culture, music, and sports. *Same as AFS/AMS 323.* *Gosse*

334. The American South:
Slavery, Secession and War, 1800–1865. (S) (U)
Traces the antebellum south and the emergence of a distinct southern identity and consciousness by examining the following topics: slavery (from the perspective of both masters and slaves), the dispossession of the Native Americans, westward expansion and territorial ambitions in Central America and the Caribbean, politics at the national and state level, and the growth of the region's intellectual life. *Same as AFS 334.* *Pearson*

339. Civil War and Reconstruction. (S) (U)
Interdisciplinary course asks students to investigate the causes, events, and results of the American Civil War and its enduring impact on American life. The class usually takes one all-day trip to battlefields. No prerequisite, although some background in 19th-century history is helpful. *Same as AMS 339.* *Stevenson*

349. Modern South Africa. (NW) (S) (WH)
With an emphasis on the 20th century, this course explores the emergence of South Africa's multi-racial society. Major themes include African state systems, European immigration and conquest, Africans' individual and collective responses to white supremacy, and changing gender roles. Students use historical documents, film, and fiction in addition to secondary readings. Participation is an important component of course grade. *Same as AFS 349.* *Anthony*

351. China and the Global Environmental Crisis. (NW) (S) (WH)
This course links the local to the global, moving from ecological issues within China to related social issues, to global ecological-economic conditions. The course examines specific cases of environmental harm within China; provides a basic environmental-scientific knowledge of these problems; studies the relationship between these cases studies and poverty, government corruption, migration, ethnic conflict, etc.; and analyzes how the above conditions in China are intertwined with global capitalism, global poverty, and other conditions on the global level. *Same as ENE/STS 351.* *Reitan*

352. From the Margins of Japanese History. (S) (WH)
The purpose of this course is to re-think Japanese history by engaging with the writings, images, and actions of those on the intellectual fringes of society: eccentrics, rebels, prostitutes, heretics, fools, outcasts, fanatics, women, and others. We will ask: Where are the "margins" of a society? How do members of "mainstream" society represent those on the margins? How do those on the margins resist, redirect, or internalize these representations? Finally, what significance do these questions have for us in the present? *Reitan*

353. China in the Western Imagination. (S) (WH) (NW)
This course deals with how "Western" travelers, philosophers, and others from the 13th century to the present have imagined China. Why study an "imagined" China? Why not study the "real thing"? Is it possible to present an objective account of the "real" China or are all narratives of China colored by the author's own cultural context? We will address these questions through the works of Marco Polo, Voltaire, Hegel, Calvino, Kafka, and others. Familiarity with Chinese history is recommended but not required. *Reitan*

356. European Sexualities. (S) (E)
Explores the transnational history of European sexualities from the 18th century through the present with special focus on the intersection of sexuality with politics and Foucauldian, performance, queer, and disability theories. Important themes, including gendered citizenship, dictatorship, democracy, dechristianization, and racialized sexualities, provide a framework within which specific topics such as female political activity, prostitution, homosexuality, bisexuality, pornography, the new woman, pronatalism, sexual revolution, and fertility are examined.
Same as WGS 356. *Mitchell*

383. Sex, Lies and Book Burning:
Life and Work of Wilhelm Reich. (S)
Upper level seminar: A survey of the life and work of famous psychoanalyst, controversial laboratory scientist Wilhelm Reich. The course reviews a wide range of Reich's writings from psychology, political science, to biology and physics (95% primary source readings). We also survey the historical context of Austria and Germany 1918-1939 and the U.S. 1939-1957. Finally we look in depth at Reich's clash with the U.S. government over whether scientific work can be judged in a court of law and the government-ordered burning of his books in 1956 and 1960. *Same as STS/WGS 383.* *Strick*

385. The Darwinian Revolution. (S) (E) (NSP)
This seminar course draws on historical and scientific work to analyze the roots of Darwinian thinking in economics, social policy toward the poor, religious thought, politics, and the sciences in which Darwin was trained. In individual research projects, students assess the ways in which "Darwinism" was applied for social, political, economic, and theological purposes, as well as scientific ones. This course provides the historical background necessary for understanding Darwinian biology and the present-day Creation/evolution conflict. Prerequisite: Permission of instructor required for first-year students to enroll. *Same as STS 385.* *Strick*

391. Directed Readings.
Tutorial. Topics adapted to the knowledge and interests of the individual student. Admission by consent of the instructor.

HISTORY SEMINARS

HIS 260 is a prerequisite or corequisite for seminar enrollment by History majors and minors. Some seminars have other prerequisites (see relevant department listings). History seminars are open to all students, although majors, minors, seniors, and juniors have priority when enrolling.

400. Selected Studies in Medieval History. (S) (E) (PM)
Readings and research on selected topics in medieval social and political history. Seminar topics include "Plague, Famine, War, and the End of the Middle Ages," "Medieval Urban Life," and "Heretics, Saints, and Sinners." *McRee*

403. Selected Studies in Modern European History. (S) (E)
Readings and research in selected aspects of the political, social, and cultural history of Modern Europe. Seminar topics include "Race in Modern Europe," "Social Discipline and Social Deviance: The Construction of Modern European Subjectivity," "The French Revolution," "The Politics of Memory," "Human Rights and Civil Rights," and "Urban History in Europe." *Schrader, Mitchell*

405. Selected Studies in Jewish History. (S) (E)
Readings and research on various topics, periods, and problems of Jewish history. *Same as JST 405*. *Staff*

407. Selected Studies in Latin American History. (NW) (S) (WH)
Readings and research in problems in the political, economic, social, and cultural history of Latin America. Seminar topics include "Sex and Sexuality in Latin America." *Same as WGS 407*. *Shelton*

408, 420. Selected Topics in the Cultural and Intellectual History of the United States. (S) (U)
Seminar topics include "Lincoln" and "During Wartime."
Same as AMS 420. *Stevenson*

409, 410, 411. Selected Studies in the Social and Political History of North America. (S) (U)
Readings and research in the social and political history of North America. Seminar topics include "The American South," "Colonial America," "The American Revolution," "The Atlantic World," "Colonies, Conquests and Empires in the New World," "Irregular Wars: Insurgency and Counter-Insurgency in the Modern World," "Vietnam, the Cold War, and After," "Rights For All: The Democratic Revolution in America." *Gosse, Pearson*

421. Selected Studies in Greek History. (S) (E)
A close examination of a particular period, place, or individual in ancient Greek history. Seminar topics include "Alexander the Great" and "Archaic Greece." Prerequisite: CLS/HIS 113. *Same as CLS 421*. *Castor*

422. Selected Studies in Roman History. (S)
A close examination of a particular period, place, or individual in ancient Roman history. Seminar topics include "Imperial Women: Power Behind the Throne," "The Rise of Rome," and "The Roman Empire." Prerequisite: CLS/HIS 114. *Same as CLS 422*. *Castor*

430. Selected Studies in African History. (NW) (S) (WP) (WH)
Readings and research in selected topics of the political, social, and cultural history of Africa. See relevant departmental offerings for prerequisites. Seminar topics include "Slavery in Africa."
Same as AFS 430. *Anthony*

450. Selected Studies in East Asian History. (NW) (S) (WP) (WH)
Readings and research in selected topics of the social, political, and cultural history of East Asia. Seminar topics include "Ecology and Japanese History" and "Memories of Empire." *Reitan*

460. Selected Studies in the History of the Middle East. (NW) (S) (WH)
Readings and research in selected topics of the political, social and cultural history of the Islamic world. Seminar topics include "Women and Gender in the Middle East" and "Humanitarianism in the Middle East." *Staff*

490. Independent Study.
Independent study directed by members of the History staff. Permission of chairperson required.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Socialism: History of an Idea.
Revolutionary America 1750-1800.
History of Reproductive Health in Mexico.
Irregular Wars: Guerillas, Partisans, Bandist, and Mujahideen.
American Popular Music, from Blues to Hip-Hop.
"Hamilton" and History.
WWI, F&M, U.S. and the World.

INTERNATIONAL STUDIES

Professor Zeshan Ismat, Chair

MEMBERS OF THE INTERNATIONAL STUDIES PROGRAM COMMITTEE

Zeshan Ismat	*Professor of Geosciences*
Jennifer Kibbe	*Professor of Government*
Elizabeth De Santo	*Associate Professor of Environmental Studies*
Danish Khan	*Assistant Professor of Economics*

Additional faculty not on the program committee also contribute to this program.

The mission of the International Studies Program is to unite a cohort of students who, both individually and in collaboration, will broaden the experience of their various major programs as they develop international and global perspectives and cultivate their ability to move between languages and cultures by immersing themselves in the languages and cultures of non-English-speaking countries. The program prepares students for future study, careers and life in our increasingly unbordered world. The International Studies Program offers two minors: one in International Studies and one in Area Studies. Students may also choose a joint major with International Studies, or earn a concentration.

A minor in International Studies requires that a student (1) take IST 200, typically the first or sophomore year; (2) propose a coherent program of four specific courses (of which no more than two can overlap with courses in the major) focusing on a particular geographical or topical theme; (3) study for at least one semester outside the United States in a non-English-speaking environment, including (where feasible) doing coursework or research in the local language; (4) achieve an approved level of proficiency in a foreign language, normally demonstrated by successful competition of two graded courses at the 200 level or equivalent (including through the College placement exam); and (5) complete IST 489, typically during fall of the senior year. In addition, while not required, an international internship is highly recommended..

A joint major in International Studies (1) take IST 200, typically during the first or sophomore year; (2) propose

a coherent program of six elective courses focusing on a particular geographical or topical theme, one of which must be numbered 300 or above, and which may include courses taken abroad with the approval of the program chair; (3) study for at least one semester outside the United States in a non- English-speaking environment, including (where feasible) doing coursework or research in the local language; (4) achieve an approved level of proficiency in a foreign language, normally demonstrated by successful competition of two graded courses at the 200 level or equivalent (including through the College placement exam); and (5) complete IST 489. Joint majors are strongly encouraged to include ANT 100, ECO 100 or 103, and GOV 130 among their electives. In addition, while not required, an international internship is highly recommended.

A minor in Area Studies requires that a student take six courses on a given geographical area, at least two of which must be at the 300 level or above, selected in consultation with a faculty member specializing in that area. The Chair of the International Studies Program will refer interested students to an appropriate adviser, with whom the student will develop a list of appropriate courses. The minor declaration form must include signatures of chairpersons of departments offering the courses included in a student's program and the signature of the Chair of the International Studies Program. Topics for which there is no existing minor housed in a regular department or program are appropriate for this minor, which would take its name from the geographical area of its emphasis, for example, African, Chinese, European Union, Francophone, Iberian, Japanese, Middle Eastern or Latin American Studies. An Area Studies minor may include courses in a language other than English, although ordinarily no more than four will be foreign language courses. IST 200 and 489 could be a part of this minor, but are not required. Study abroad and language proficiency are strongly recommended but not required.

In addition to the minor, the International Studies Program offers a concentration. Requirements for the concentration are the same as for the International Studies minor except that the concentration requires only two courses in addition to IST 200 and IST 489. These two courses can be either inside or outside the student's major and are expected to cohere with and bring a significant international dimension to the student's chosen major.

Recent students in the program have studied abroad in Argentina, Bolivia, China, Denmark, Dominican Republic, France, Germany, Italy, Jordan, Mongolia, Spain, Switzerland, Thailand, and Uganda through programs run by the School for International Training (SIT), the Institute for the International Education of Students (IES) and various U.S. colleges and universities. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement t; (WP) World Perspectives requirement.

200. Introduction to International Studies. (NW) (S) (WP)
Interdisciplinary course required for students with an International Studies minor or concentration. Through coordinated lectures by a team of F&M faculty and guest speakers, students will consider topics such as globalization, security, migration, human rights, sustainability, and consumerism in the light of various disciplines. Offered every Fall.
Ismat

228. Middle Eastern Music and Culture. (A) (NW)
This interdisciplinary course will explore the musical identities of the Middle East and North Africa in terms of the complex sociological, historical, and political processes that have shaped the region. We will proceed from the idea that music is a powerful agent in the negotiation of power and identity, and examine the ways in which it has been utilized throughout transformative periods of history. Particular attention will be given to the transnational and diasporic nature of musics under consideration. Classical, folk, and popular musical traditions will be considered, as will the roles of art, popular culture, and mass media.
Same as MUS 228. *Alajaji*

314. Global Environmental Politics. (S)
Analysis of environmental problem definition and policy solutions in different countries, with particular focus on the developing world. Effects of political drivers of air and water pollution, land cover change, and biodiversity conservation. Influence of political structures, power relations, cultural values, ecological dynamics, and social interactions on environmental politics. Roles of national and multilateral institutions, NGOs, and civil society in policy debates. Outcomes of multi-stakeholder negotiations over environmental governance of global commons, including North-South disputes. Prerequisite: ENV/ENE216 / GOV100. Counts as Human Environment core course for Environmental Studies.
Same as GOV374 and ENE314. *Bratman*

319. Making Sense of Putin's Russia: From Perestroika to Presidential Election Tampering (S)
This course will explore these issues by examining the factors leading up to the collapse of the Soviet Union: Gorbachev's attempts to reinvigorate the system economically and politically through his policies of perestroika and glasnost' that ended with the collapse of the Berlin Wall and breakup of the Soviet Union; the creation of the present-day Russian regime under Yeltsin, whose close ties to the oligarchs helped usher in an era of unprecedented corruption and the emergence of the Russian mafia; and the change in leadership from Yeltsin to Vladimir Putin, whose crackdown on democratic institutions like the free press and civil liberties and whose Cold-War-era style posturing alarms the West and has stoked the beginnings of grass-roots opposition movements (and ruthless crackdown against them) at home. In addition to lecture and discussion of common readings, students will do presentations of focused topics that they will then turn into final papers for the course.
Same as HIS/RUS 319. *Schrader*

327. Latin American Politics. (NW) (S) (WP)
This course introduces students to Latin American government and politics. The course provides a brief overview of the region's history and a discussion of some of the key issues shaping the region's politics, including: authoritarianism and democracy; development and dependency; and revolution. The rest of the course will be dedicated to a survey of the politics of several countries from different areas of Latin America.
Same as GOV327. *McNulty*

350. International Business. (S) (WP)
Students in this course will learn about the history of international business, investigate the political and economic institutions that structure the global economy, and explore the impact of international environments on firm-level decisions. Same as BOS 350. *Kim*

489. International Studies Seminar. (S) (NW)
This capstone seminar for International Studies seniors is also open to other seniors with permission of the instructor. The course will be organized around a core set of readings on one broad international topic: in Fall 2017 Power, Identity, and Resistance in the Post-Colonial Age. Students will define an individualized research program, building on their previous coursework in International Studies, share readings and findings with fellow seminar students and produce a final paper and oral presentation. Prerequisite: IST 200 and study abroad. Offered every Fall. *Anthony*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

HIS/IST 272. Socialism: History of an Idea. (fall)
MUS/IST 373. Middle Eastern Music and Culture. (fall)
HIS/IST 475. Irregular Wars. (fall)
MUS/IST 176. Global Popular Music. (spring)
HIS/IST 319. Putin's Russia. (spring)

ITALIAN STUDIES AND HEBREW

Professor L. Scott Lerner, Chair

L. Scott Lerner	*Arthur and Katherine Shadek Professor of the Humanities and French and Italian*
Giovanna Faleschini Lerner	*Professor of Italian*
Marco Di Giulio	*Associate Professor of Hebrew Language and Literature*
Maya Greenshpan	*Hebrew and Italian Language Teaching Fellow*

ITALIAN STUDIES

Students who choose to study Italian at Franklin and Marshall immerse themselves in the rich humanistic tradition of Italian culture and reflect critically on Italy's unique position in global society. Those who earn a major or minor in Italian attain proficiency in the language and gain a solid knowledge of Italy's contributions to literature, cinema, the arts, and politics. Engaging in humanistic inquiry for its own sake, students of Italian learn to excel in critical analysis, creative thinking and effective written and oral communication, with the added cognitive and practical benefits of immersion in a foreign language. They thus become creative interpreters of Italian culture while acquiring core skills that are easily transferable to any number of other areas. Students who complete a major or minor in Italian will have built a foundation for life-long learning and success in any 21st-century career.

Italy is conceived broadly and dynamically in this program, as a space shaped by global forces and the circulation of objects, people, and ideas across borders. Italian at F&M is typically pursued as a four-year course of study in which students take one course in the program during each semester they are on campus and also study abroad with F&M's six-week summer program in Tuscany and/or for a semester or a full year at an approved program in Padua, Milan, Florence, Perugia or elsewhere.

On campus, small classes allow students to work closely with faculty in an informal atmosphere that encourages the pursuit of individual intellectual interests and learning. Courses are conducted in Italian from the introductory levels, and students are encouraged to practice the language outside of class through a variety of co- and extra- curricular opportunities.

The Italian Minor and Major prepare students for any number of future careers. In some cases, these include research and teaching in the humanities and social sciences: in History, Classics, History of Art, Comparative Literature, Urban Studies, Film Studies, Architecture, or other areas. Italian, on its own or as part of a double or joint major, may also serve as an excellent foundation for a wide range of post-graduate professional programs, including, for example, those in public or business administration, law, or the healing arts. Recent graduates of the Department have pursued careers in education and research, government and diplomatic service, travel and tourism, music and art.

Italian Major

The Italian Department offers a major with two distinct tracks, one in **Italian** and one in **Italian Studies.**

The Italian track involves all coursework in the Italian Department, and therefore in the Italian language. This track offers the greatest opportunity for refining, using, and being exposed to the language as a cultural form shaped by its political, historical, literary, artistic, and social contexts.

The Italian Studies track allows students to take two courses for the major outside of the Department. In these two courses, taught in English, students approach Italian history and culture through the lenses of specific humanistic fields: Art History, Classics, Comparative Literature, History, or Music.

The **Italian track** consists of the following ten courses: ITA201, ITA202, ITA310,

one course among ITA354, ITA355, or ITA356

two departmental electives at the 200-level or above*

two courses among ITA365, ITA366, ITA367, or ITA368

one additional elective at the 300 level or above*

ITA 481 or another 400-level course.

The **Italian Studies** track consists of the following ten courses: ITA201, ITA202, ITA310,

one course among ITA354, ITA355, or ITA356

one departmental elective at the 200-level or above*

two courses among ITA365, ITA366, ITA367, or ITA368

ITA 481 or another 400-level course,

and two courses taught in English, chosen among:

Comparative Literary Studies:

Any cross-listed course in ITA/LIT

LIT101 Literatures of the World: Introduction to Comparative Literary Studies

Classics:

CLS/HIS114 History of Ancient Rome, CLS/ART117 Roman Art and Archeology, CLS322 Selected Studies in Roman History, CLS37X Topics in Roman Art and Archaeology (this is a permanent course even though it has the - 7X ending.)

History:

HIS/CLS114 History of Ancient Rome, HIS115 The Middle Ages, HIS117 Early Modern Europe, HIS121 Revolution and Reform: Europe in the 19th Century, and HIS122 Revolution, Dictatorship, and Death: Europe in the 20th Century, HIS315 End of Middle Ages

Music:

MUS230 Music History 1: Antiquity to 1750, MUS231 Music History 2: 1750 to Present, MUS285, 385, or 485 Voice

Art History:

ART231 Art and Architecture of the Italian Renaissance, ART/CLS117 Roman Art and Archeology

*An elective could be any other 300-level course from the list above, a course taken with F&M in Tuscany, a topics course offered by a visiting or permanent faculty member, or a class taken abroad.

Students who have placed at the 300 level may design a different sequence in consultation with the Department chair. Students may include up to two electives from study abroad in the major with the approval of the Department chair. The writing requirement in the Italian major is met by completion of the regular course sequence required to achieve the major.

Italian Minor

A minor in Italian consists of six courses beyond ITA101. Students must take ITA310 and at least one course among ITA354, ITA355, ITA356, ITA365, ITA366, ITA367, or ITA368. They may take one additional elective at the 200 level or above, which should be chosen in consultation with the Department chair. Students must complete all coursework in Italian. Students may include in the minor up to two courses taken abroad with another institution with the approval of the chair. Students who have placed at the 300 level may design a different sequence in consultation with the Department chair.

Joint and Special Studies Majors

Students are able to integrate Italian Studies and other fields of academic interest by designing a Joint or a Special Studies Major that includes Italian. A Special Studies Major including Italian will consists of five courses in Italian, five courses divided between two other programs or departments, and one research course, SPC490. A Joint Major consists of eight courses in Italian and eight courses in another department. Typically, the Italian component of a joint major will consists of ITA201, ITA202, ITA310, two courses among ITA354, ITA355, ITA356, ITA365, ITA366, ITA367, or ITA368, a senior seminar or another 400-level course, and two departmental courses that reflect the intersecting interests of the individual student, selected in consultation with the Department chair. Joint Majors have combined--for example--Theater, Spanish, English, History, Business Organization and Society with Italian, and Special Studies Majors have designed their own programs in Comparative Literature or Romance Languages.

Study Abroad

A study abroad experience in Italy is integral to the learning goals of the Italian Major and Minor and is strongly encouraged. Studying in Italy offers the opportunity to practice and strengthen linguistic competence, contextualizes language learning in the evolving social realities of Italy, develops students' cross-cultural competencies, and constitutes an occasion for self-reflection and self-awareness in the face of cultural difference. Franklin & Marshall has its own immersion summer study abroad program in Tuscany, offering courses in Italian language and culture, advanced courses in literature, and independent studies, which are fully integrated with the on-campus curriculum (see Summer Travel Courses for information about coursework). The Department offers this program most summers and financial aid is available. In recent years, students of Italian have also studied abroad for a semester in the following programs: Boston University in Padova, Arcadia University in Perugia, Sarah Lawrence and Syracuse in Florence, IES in Rome or Milan. See the International Programs section of the Catalog for further information.

HEBREW

Hebrew is sometimes called the holy language (leshon hakodesh), since it is the original language of the Hebrew Bible. Today, it is also a modern spoken language and the official language of the state of Israel. The study of Hebrew confers many benefits, including the ability to function in and understand modern Israeli society, and a more nuanced comprehension of ancient texts. Franklin & Marshall offers three years of Hebrew language instruction as part of the Judaic Studies minor (see Judaic Studies), an Area Studies minor, or to fulfill the College's general language requirement. Hebrew classes are designed not only to develop listening, reading, speaking, and writing skills, but also to emphasize appreciation for the culture and history connected with the language. The Judaic Studies program strongly encourages further study of Hebrew abroad; students have pursued advanced studies at the Hebrew University of Jerusalem and the University of the Negev in Beer Sheva.

A minor in Hebrew Language and Literature includes: at least three Hebrew language courses, one of which must be at the 300-level; any three JST courses. Appropriate substitutions may be approved by the program chair. See also: Judaic Studies.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

COURSES IN ITALIAN STUDIES

All courses are taught in Italian unless indicated otherwise.

ITA 101. Elementary Italian I.
The aim of this course is to develop basic language skills in Italian, including speaking, listening comprehension, reading and writing, with particular emphasis on communication. The course also provides an introduction to contemporary Italy and its artistic, literary, cinematic and culinary traditions. Offered every Fall. *S. Lerner*

ITA 102. Elementary Italian II.
Continuation of ITA 101. Prerequisite: ITA 101 or placement. Offered every Fall. *Greenshpan*

ITA 201. Intermediate Italian Language and Culture I. (LS)
A continuation of the study of the Italian language, emphasizing speaking, listening, reading and writing. Combines comprehensive grammar review with more in-depth study of Italian culture, based on films, short stories, poems and songs. Prerequisite: ITA 102 or placement. Offered every Fall. *Faleschini Lerner*

ITA 202. Intermediate Italian Language and Culture II. (LS)
The continuation of ITA 201, this course further develops language skills with an increased emphasis on analytic thinking and writing, as well as oral communication. It completes the presentation of the principal grammatical

structures begun in the previous semester while continuing the examination of Italian culture through literary texts, songs, and films. Prerequisite: ITA 201 or placement. Offered every Spring. *Faleschini Lerner*

ITA 310. Introduction to Italian Literary Studies. (H)
An introduction to literary studies in Italian. Particular authors and themes will vary. (Recently: the Italian detective novel, readings by Leonardo Sciascia and Carlo Lucarelli.) Complementary study of advanced Italian grammar. Prerequisite: ITA 202 or placement. *S. Lerner*

ITA 354. Age of Dante. (H) (LS)
In his epic tale of man's journey to redemption, Dante Alighieri created a masterpiece that continues to challenge our assumptions about good and evil, love and life. From Geoffrey Chaucer to Dan Brown, abolitionists to Romantics, Dante's work has inspired generations of authors and artists, and stands today as one of the great pillars of Western literature. Through close readings of Inferno, Purgatory, and Paradise, as well as class discussions and presentations, we will situate Dante's work within the social and religious context of the late Middle Ages. Throughout the course, we will consider the study of Dante's Comedy not only as a literary exercise, but also as a mysterious poem that enriches our vision of the world. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. *Staff*

ITA 355. Modern Italy. (H)
An introduction to the historical and political evolution of Italy as a modern nation through the lens of its cultural production. Traces the emergence of the nation from its ideological and political beginnings in the French Revolution, the Italian republics and kingdom under Napoleon, and the Risorgimento movement of national unification. Follows the subsequent path of the young nation through the world wars and Fascism, the post-war "boom," and the reforms of the 1990s to the present. The cultural lens is provided by literary and cinematic works by Tomasi di Lampedusa, Visconti, Ungaretti, Marinetti, Tabucchi, Primo Levi, Benigni, Giordana and Moretti. Includes advanced study of spoken and written Italian and topics in advanced grammar. Prerequisite: ITA 310 or permission of the instructor. *S. Lerner*

ITA 356. Italian Film History. (A)
Introduction to Italian film history, with an emphasis on the relationship between cinema and society and culture. May include influential auteurs (Visconti, De Sica, Antonioni, Pasolini, Fellini) and movements (Neorealism, cinema politico), as well as popular forms (commedia all'italiana), genre films, experimental filmmaking, and documentary. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. . *Same as FLM 356*. *Benini*

ITA 365. Verismo and Modernism in Italian Literature. (H)
An exploration of the Italian literary, operatic and theatrical traditions of two golden ages: late nineteenth-century verismo and early twentieth century modernism. Principal authors may include Giovanni Verga and Luigi Pirandello. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. *S. Lerner*

ITA 366. Italian Cinema and the Arts. (H)
Cinema has presented itself, since its very origins, as a synthetic form of art that could incorporate painting, architecture, sculpture, as well as music, literature, and dance. This course aims to explore the different ways in which inter-artistic dialogue has influenced the development of Italian cinema, determining the style of its major auteurs and contributing to the complexity of their films. A series of critical and theoretical readings will help us develop a solid interpretive approach to the films, which will include works by Fellini, Antonioni, Pasolini, Visconti, Rossellini, and other filmmakers. Normally taught in Italian. Prerequisite: ITA 310 or permission of the instructor. *Same as FLM 366*. *Faleschini Lerner*

ITA 367. Women and Gender in Italian Literature. (H)
This course focuses on Italian women writers from the nineteenth century to the present. Authors may include Aleramo, Banti, Morante, Ginzburg, Maraini, and Ferrante, among others. Literary analyses of the texts will be placed in the context of Italian cultural history, the history of Italian feminism and post-feminism, and the tradition of Italian feminist philosophy, allowing for a deeper understanding of the ever-changing role of gender roles and dynamics in modern Italy. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. *Same as WGS 367*. *Faleschini Lerner*

ITA 368. Post-War and Contemporary Italian Fiction. (H)
Italian literature from the end of the second world war to the present with an emphasis on the genres of the novella, the short story and the novel. The first part of the course will be devoted to two classic writers: Italo Calvino and Dino Buzzati, known for their innovative blend of realism and the fantastic; the second part will examine their successors, with works by Alessandro Baricco, Michela Murgia, Anna Luisa Pignatelli, or others. Taught in Italian. Prerequisite: ITA 310 or placement.. *S. Lerner*

ITA 391. Directed Reading.

410. Italian Literary and Cultural Studies II. (H)
Studies in classical Italian poetry and prose (authors have included Dante, Boccaccio, Manzoni, Collodi, Pirandello and D'Annunzio). Advanced spoken and written Italian, selected topics in grammar. Prerequisite: ITA 354, ITA 355, or ITA 356. *S. Lerner*

ITA 490. Independent Study.

SUMMER TRAVEL COURSES

ITA 240-340. Landscapes of Tuscany.
This interdisciplinary course is part of the Italian Summer Program's full-immersion linguistic and cultural experience in Italy. Through readings in Italian literature, history, and art history, integrated with site visits, nature hikes, and research projects, students explore the cultural and natural landscapes of Tuscany, especially in the Mugello Valley, where the summer program is held. Prerequisites: ITA 102, ITA 202, or permission of the instructor. Corequisite: ITA 241/341 or ITA 242/342. Taught in Italian.
Faleschini Lerner, S. Lerner

ITA 241-341. Florence, Capital of the Renaissance.
This course is part of the Italian Summer Program's full-immersion linguistic and cultural experience in Italy. It explores the historical and social underpinnings of Renaissance Florence through readings in medieval and Renaissance literature, as well as "hands-on" learning components involving cultural visits, map-making, and the collaborative creation of a literary guide to the city. Prerequisites: ITA 102, ITA 202, or permission of the instructor. Corequisite: ITA 240/340.
Faleschini Lerner, S. Lerner

ITA 242-342. Italian Urban Cultures.
This course is part of the Italian Summer Program's full-immersion linguistic and cultural experience in Italy. Students learn about Italian urban cultures through an integrated approach that includes literary texts, analyses of works of art and urban landmarks, and historical and architectural research, as well as day and weekend trips to the specific cities being examined (Rome, Palermo, Ferrara, Urbino). As appropriate to their linguistic level, students are responsible for planning itineraries and preparing guided tours of the cities. Prerequisites: ITA 102, ITA 202, or permission of the instructor. Corequisite: ITA 240/340. Taught in Italian.
Faleschini Lerner

COURSES IN MODERN HEBREW LANGUAGE

JST 101, 102. Elementary Modern Hebrew I and II.
Introduction to the basic structures and vocabulary of Modern Hebrew, oral and written. 101 is offered every Fall, 102 is offered every Spring.
Greenshpan

JST 201, 202. Intermediate Modern Hebrew I and II. (LS) (NW) (WP for 201) (H for 202)
Further development of oral, reading and writing skills in Modern Hebrew. 201 is offered every Fall, 202 is offered every Spring. *Di Giulio*

JST 301. Reading Hebrew Texts and Contexts. (H)
In addition to expanding their knowledge of Hebrew grammar through the study of more complex structures, students in this course will read contemporary fiction in its historical and socio-cultural context. In particular, the course will examine the interplay between Hebrew literature and life in Israel in the work of such authors as Savyon Liebercht, Etgar

Keret, Meir Shalev, and Avigdor Dagan. Course topics will include literary representations of the Israeli landscape, the tension between Israel and the diaspora, and the development of Post-Zionist literary sensibilities.
Di Giulio,

Directed readings at more advanced levels may be arranged with Hebrew Language faculty.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

Recent Italian Fiction.

JAPANESE LANGUAGE

Ken-ichi Miura, Director of the Japanese Language Program
Professor Jonathan Stone, Chair, Department of German, Russian & East Asian Languages

Ken-ichi Miura — *Director and Senior Teaching Professor of the Japanese Language Program*

Franklin & Marshall offers four years of Japanese language instruction, with more advanced study available on a tutorial basis. Many students of Japanese also participate in summer or semester abroad programs at such institutes as Hokkaido International Foundation (HIF), CET Osaka and Kyoto Consortium for Japanese Studies (KCJS).

At Franklin & Marshall, the Japanese program offers students the opportunity to develop communicative skills in Japanese. We emphasize the authentic use of the language rather than mere knowledge of vocabulary and grammar. We also host weekly tea hours in which various cultural aspects are introduced, as well as Japan-related lectures and events.

We introduce contemporary Japanese language within the appropriate cultural context, so students also gain the requisite awareness and skills that will enable them to function appropriately and successfully in modern Japanese society.

An Area Studies minor in Japanese may be arranged in consultation with Professor Douglas Anthony, Director of International Studies and Ken-ichi Miura, Director, Japanese Language Program.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

101. Elementary Japanese I.
Introduction to contemporary Japanese language through cultural context. Developing listening, speaking, reading and writing skills, including mastery of the Hiragana and Katakana Japanese writing systems and introduction to Kanji characters. For students with no previous training in the language. Offered every Fall. *Miura*

102. Elementary Japanese II.
Continued practice in listening, speaking, reading and writing skills of contemporary Japanese in cultural context. Further development of reading and writing Kanji characters. Prerequisite: JPN 101 or permission of instructor. *Miura*

201. Intermediate Japanese I. (NW) (LS)
Development of contemporary Japanese listening, speaking, reading and writing skills at the intermediate-low level through cultural context, including continued practice in reading and writing Kanji characters. Prerequisite: JPN 102 or permission of instructor. Offered every Fall
Miura

202. Intermediate Japanese II. (NW) (H) (LS)
Continued development of contemporary Japanese listening, speaking, reading and writing skills at the intermediate level in cultural context, including handling a variety of informal and formal situations. Further practice in reading and writing Kanji characters. Prerequisite: JPN 201 or permission of instructor. Offered every Spring. *Miura*

221. Introduction to Japanese Popular Culture. (NW) (H)
Japan's pop culture has gained great popularity all over the world. Such genres include anime, manga, and J-pop, to name a few. This course examines several major genres focusing on historical and cultural background, and their impact on Japanese society. Through reading the writings of notable cultural critics, students will learn to analyze each genre in depth as well as examine the interrelationship among them. Each student will choose his/her own research topic for a final presentation. (Not offered in 2022-2023)

301. Upper Intermediate Japanese I. (NW) (H)
Development of listening, speaking, reading and writing skills at the upper intermediate level of contemporary Japanese in cultural context, including handling a variety of informal and formal situations and continued practice in reading and writing Kanji characters. Prerequisite: JPN 202 or permission of instructor. (Not offered in 2022-2023)

302. Upper Intermediate Japanese II. (NW) (H)
Continued development of listening, speaking, reading and writing skills at the upper intermediate level of contemporary Japanese in cultural context, including handling a variety of informal and formal situations, as well as further practice in reading and writing Kanji characters. Prerequisite: JPN 301 or permission of instructor. (Not offered in 2022-2023)

401. Upper Intermediate Japanese III. (NW) (H)
Development of listening, speaking, reading and writing skills at the upper intermediate to advanced level of proficiency in contemporary Japanese in cultural context, including handling a variety of informal and formal situations and continued practice in reading and writing Kanji characters. Introduction of some authentic audio-visual and reading materials. Prerequisite: JPN 302 or permission of the instructor. (Not offered in 2022-2023)

402. Upper Intermediate Japanese IV. (NW) (H)
Development of listening, speaking, reading and writing skills at the upper intermediate to advanced level of proficiency in contemporary Japanese in cultural context, including handling a variety of informal and formal situations, as well as further practice in reading and writing Kanji characters. Further practice in handling some authentic audio-visual and reading materials. Prerequisite: JPN 401 or permission of the instructor. (Not offered in 2022-2023)

Tutorials at more advanced levels may be arranged with the Director of the Japanese language program.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

Japanese through Cultural Context.

JUDAIC STUDIES

Professor L. Scott Lerner, Chair

MEMBERS OF THE JUDAIC STUDIES PROGRAM COMMITTEE

Alan Glazer	*Henry P. and Mary B. Stager Professor of Business*
L. Scott Lerner	*Arthur and Katherine Shadek Professor of the Humanities and French and Italian*
Stephen Cooper	*Professor of Religious Studies*
Jeffrey S. Podoshen	*Professor of Marketing*
Marco Di Giulio	*Associate Professor of Hebrew Language and Literature*
Rachel Feldman	*Assistant Professor of Religious Studies*
Kabi Hartman	*Director of the Program in Support of Academic Excellence and Senior Teaching Professor of English*
Maya Greenshpan	*Hebrew and Italian Language Teaching Fellow*

Additional faculty not on the program committee also contribute to this program.

The Judaic Studies program is designed to introduce students to the religion, history and literature of the Jewish people and to their interactions with the other peoples among whom they have lived. In the Western world, Jewish thought has been foundational to our common culture, yet the experience of the Jewish people, like that of other excluded minorities, has often diverged profoundly from that of the majority. The study of Judaism and of the varieties of Jewish experience can thus be both a complement and a corrective, to any course of study examining the history and culture of Europe, the Middle East, North Africa and the Americas. The program for minors provides a comprehensive introduction to the religious, cultural and political traditions of Jewish life from its origins to present day.

A major in Judaic Studies may be arranged through the Special Studies Program described in this Catalog. A Joint Major consists of eight Judaic Studies courses in addition to designated courses from any department/program offering a major. At least two of the Judaic Studies courses must be Hebrew language.

Students minoring in Judaic Studies may pursue one of two tracks: Jewish History and Culture, or Hebrew Language and Literature. Both consist of six courses.

The Jewish History and Culture track includes: JST 112; one of the following courses: JST 154, 252; one of the following courses: JST 153, 212; three electives, two of which can be Hebrew language and at least one of which must be an upper-division course or independent study. At least one course must be taught by HIS faculty; at least one course must be taught by RST faculty.

The Hebrew Language and Literature track includes: at least three Hebrew language courses, one of which must be at the 300-level; any three JST courses. Appropriate substitutions may be approved by the program chair.

Minors must take at least four courses at Franklin & Marshall. To be considered for honors in Judaic Studies, graduating seniors, in addition to meeting the College's general requirements for honors, must complete and defend a thesis of high quality.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

COURSES IN MODERN HEBREW LANGUAGE

101, 102. Elementary Modern Hebrew I and II.
101. Every Fall; 102. Every Spring
Introduction to the basic structures and vocabulary of Modern Hebrew, oral and written. *Greenshpan*

201, 202. Intermediate Modern Hebrew I and II.
(LS) (NW) (WP for 201) (H for 202)
201. Every Fall; 202. Every Spring *Di Giulio*

301. Reading Hebrew Texts and Contexts. (H)
In addition to expanding their knowledge of Hebrew grammar through the study of more complex structures, students in this course will read contemporary fiction in its historical and socio-cultural context. In particular, the course will examine the interplay between Hebrew literature and life in Israel in the work of such authors as Savyon Liebercht, Etgar Keret, Meir Shalev, and Avigdor Dagan. Course topics will include literary representations of the Israeli landscape, the tension between Israel and the diaspora, and the development of Post-Zionist literary sensibilities.
Di Giulio

JUDAIC STUDIES COURSES

112. Judaism. (H) (NW)
This course will focus on a number of classical texts ranging from the biblical period to the present early modern times. With the exception of a few selections, all have had their impact on Jewish culture in the Hebrew language. The chief aim of the course is to immerse students in the questions the texts raise, thus exposing them to continuity and change in Jewish self-understanding over time. The desired outcome is that the students become aware of certain key concepts (e.g. covenant, chosenness, prophecy, exile, redemption, Jewish law) and the continuing debates around them. *Same as RST 112.* *Feldman*

153. Premodern Jewish History: Jews of East and West Through the Middle Ages. (NW) (S)
Introduction to Jewish history, beginning with first centuries of the Common Era and continuing to end of 17th century. Examines central themes and patterns in Jewish history with focus on the development of major Jewish communities in Christian Europe and the Arab/Muslim world. Course looks at relationships between Jewish and non-Jewish cultures and communities during this time. *Same as HIS/RST 153.* *Staff*

154. Jews in the Modern World. (S)
Introduction to the modern era from late 18th century Emancipation and Enlightenment through the mid-20th century, tracing the transformations of Jewish life. Broad historical sketches are combined with close readings of particular texts, movements, and thinkers to flesh out the contours and dynamics of the Jewish experience in the Modern world. Major events of Jewish history of 20th century (the Holocaust, foundation of the State of Israel, and mass migration of European Jews to the Americas) are examined through secondary and primary sources. *Same as HIS/RST 154.* *Staff*

212. Hebrew Bible. (H) (NW)
Study of the writings of the Hebrew Bible. Seeks to understand the historical development of Israel in the biblical period and the religious forms of thought and practice that arose during this time. *Same as RST 212. Cooper*

252. Modern Jewish Thought. (H)
Studies Jewish thinkers from the Enlightenment to the present, through their philosophical writings, political essays, religious reflections and fiction. The chief question was how to make the Jewish tradition adapt or

respond to the modern Western State and to modern Western culture. This is a course about the Jews and the West. To what degree is there harmony? To what degree is there conflict? *Same as RST 252.* *Feldman*

340. Jews in the Greco-Roman World. (H)
Focuses on Jews and Judaism during the period of profound changes after the conquest of Alexander the Great that were key to development of modern Judaism and Christianity. Surveys variety of Jewish writing from the period: historical; philosophical; apocalyptic; and exegetical. These texts, including Dead Sea scrolls, will be read in combination with modern scholarly works treating Jewish life and history of the period. *Same as RST 340.* *Cooper*

341. Israel/Palestine: Beyond the Binary 2020. (H) (NW) (WP)
The Israel/Palestine conflict is often portrayed as an intractable struggle between two diametrically opposed and homogeneous nations. This course challenges that framing by offering students an in-depth encounter with Israeli and Palestinian societies, which contain a multiplicity of political, religious, and ethnic groups. Between the poles of "Israel" and "Palestine" students will discover many other underrepresented identities: Arab Jews, African refugees, foreign workers, Bedouin, and Palestinian feminists (just to name a few). By studying literary works as well as ethnography — first-hand accounts of Israel/Palestine conducted by cultural anthropologists — students will gain an intimate window into the daily life of Palestinians and Israelis and a more nuanced perspective on the conflict as a whole, as a conflict not only involving territorial disputes but contested religious ideologies, experiences of displacement and exile, economic and racial inequality. Students will also have the opportunity participate in skype Q&A sessions with activists working to advance peace in the region. *Same as RST 341.* *Feldman*

405. Approaches to Jewish History. (S)
Readings and research on various topics, periods, and problems of Jewish history. Same as HIS 405. *Staff*

490. Independent Study.
The student pursues an in-depth investigation of a topic of special interest, under the direction of an adviser. Please see the Chair with any questions.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

Design Thinking and Conflict Resolution.
Pagans, Jews, and Christians.

LATIN AMERICAN AND LATINX STUDIES

Professor Sofia Ruiz-Alfaro, Chair

MEMBERS OF THE LATIN AMERICAN STUDIES COMMITTEE

Sofia Ruiz-Alfaro	*Associate Professor of Spanish*
Carmen Tisnado	*Professor of Spanish*
Eve Bratman	*Associate Professor of Environmental Studies*
Eric Hirsch (on leave Fall 2022)	*Associate Professor of Environmental Studies*
Laura Shelton (on leave Spring 2023)	*Associate Professor of History*
Scott C. Smith	*Associate Professor of Anthropology*
Cristina Perez	*Assistant Professor of American Studies*
Mark Villegas	*Assistant Professor of American Studies*
Stephanie McNulty	*Associate Professor of Government*

Additional faculty not on the program committee also contribute to this program.

Latin American and Latinx Studies is an interdisciplinary program that examines the cultures, histories, societies, politics, and art of Latin American countries and Latinx communities.

Students completing the minor will graduate with a broad introductory background in key themes relating to the study of Latin America. Among the disciplines contributing to the Latin American Studies minor at F&M are Anthropology, Environmental Studies, Government, History, and Spanish.

A minor in Latin American and Latinx Studies consists of six courses:

Three courses from the five following core courses in History, Anthropology, American Studies and Government:

HIS 131: History of Colonial Latin America: From Contact to Revolution.

HIS 132: Latin American and Its People: Revolution and Modernity.

AMS 120: Introduction to Latinx Studies

ANT 257: People and Cultures of the Andes.

ANT 253: Andean Archaeology.

GOV 327: Latin American Politics.

Three electives from the following list:

HIS 235: U.S.-Mexico Borderlands.

HIS 318: Environmental History of Latin America. Same as ENE318.

HIS 407: Sex and Sexuality in Latin America.

SPA 343: Cuentos del Rio de la Plata (requires SPA 321).

SPA 410: El Boom Latinoamericano (requires SPA 321).

SPA 412: El Exilio Hispanoamericano (requires SPA 321).

SPA 414: El Detective Hispano (requires SPA 321).

SPA 445: Latin America On Stage (requires SPA 321).

SPA 485: La invención de Cuba (requires SPA 321).

Topics Courses. Including, but not limited to:

HIS 375: Modern Mexico.

SPA 470: Cuban Culture (requires SPA 321).

SPA 475: Slavery and Literature in the Hispanic Caribbean (requires SPA 321).

Independent Study or Directed Reading

With the approval of the program coordinator, electives may also be taken through a study abroad program in Latin America. Latin American Studies courses that require SPA 321 as a prerequisite may be open to students who are not taking Spanish courses, but who are proficient at the level of SPA 321 as determined by the instructor.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

CORE COURSES

AMS 120. Introduction to Latinx Studies. (S)
This course considers key theoretical contributions that speak to the construction, expressions, and representations of Latinx identities in the US. We will take up an intersectional approach, one that emphasizes the diversity of Latinx experiences and the ways they are mediated by US and transnational understandings of race/ethnicity, gender, sexuality, nationality, and class. Of particular interest is how Latinx folks articulate fraught or ambivalent relationships to the US, to larger transnational communities,and to Latinidad itself. By way of method, the course will blend interdisciplinary scholarly and theoretical readings with a range of cultural texts that will allow us to deepen, extend, or complicate our understanding of Latinidad. *Perez*

ANT 253. Andean Archaeology. (NW) (S) (WP)
This course explores the cultural diversity of the central Andes of South America from the original arrival of migrants over 12,000 years ago to contact with Spanish conquistadors in the early 16th century. Geographically, the course will focus on prehistoric cultures that occupied the modern countries of Peru, Bolivia, and Ecuador. Themes include: debates about the initial migration to the region, early food production, the origins of social complexity, ceremonialism, state formation and disintegration, and conquest by Spain. Prerequisites: ANT100, or ANT102 or permission of instructor. *Smith*

ANT 257. People and Cultures of the Andes. (NW) (S) (WP)
This course focuses on the mountainous Andean region of South America and provides an overview of Andean society from AD 1500 to present. We will examine the colonial matrix in which Iberian and Andean social, political, and cultural forms came together. This course uses ethnographies, contact period chronicles, indigenous narratives, novels, testimonials, and film about contemporary Andean society to address issues of colonialism, race, class, ethnicity, gender, and human-environment relationships. Geographically, this course focuses on the region encompassed by the modern nations of Ecuador, Peru, and Bolivia. Prerequisite: ANT 100, ANT 102, or permission of the instructor. *Smith*

GOV 327. Latin American Politics. (NW) (S) (WP)
This course introduces students to Latin American government and politics. The course provides a brief overview of the region's history and a discussion of some of the key issues shaping the region's politics, including: authoritarianism and democracy; development and dependency; and revolution. The rest of the course will be dedicated to a survey of the politics of several countries from different areas of Latin America. *McNulty*

HIS 131. History of Colonial Latin America: From Contact to Revolution (NW) (S) (WH) (PM)
Survey of Latin America from pre-Conquest times to the present. Begins with historical backgrounds of indigenous societies as well as Spain, Portugal, and Africa before 1492, followed by an examination of the conquest and colonial period through independence. The course focuses on the contributions of these major cultural groups in the formation of colonial Latin American society and culture. *Shelton*

HIS 132. Latin America and Its People: Revolution and Modernity (NW) (S) (WH)
Focuses on comparative history and political economy, U.S.-Latin American relations, and cultural forces. The course introduces students to the major trends, problems, and forces that have shaped current-day Latin American societies since the late colonial period. A focus on case studies is complemented by an examination of broad patterns of change in Latin America as a whole. *Shelton*

ELECTIVE COURSES

ENE 244. Indigenous Environmental Justice. (NW) (S)
Examination of the way indigenous identity, human rights, and development intersect with the struggle for environmental justice around the world. Analysis of how each term in this course's title is open to legal fixing, activist redefinition, and diverse projects that render the environment something political. Considers distinct case studies drawn from several continents to show that some see being indigenous today as politically potent, while others take this category to be excessively vague or, even, invented; by focusing on ordinary lives and extraordinary struggles, we explore the wide variety of relationships to territory that "indigenous" encapsulates. *Same as STS244.* *Hirsch*

HIS 318. Environmental History of Latin America. (NW) (S) (WH)
This course will examine the intersections of human history and culture with environmental change in Latin America from the early colonial period to the present. The major themes include the consequences and significance of the Columbian Exchange, the roles of religion and culture in shaping human relationships with nature, the development of export-led agriculture, urbanization, and the emergence of diverse environmental movements within Latin America. We will explore the origins of major environmental problems and the ways people have responded to these challenges. The course will also address how historians have approached the study of the environment. *Same as ENE 318.* *Shelton*

HIS 323. Cuba and the United States: The Closest of Strangers. (S)
This course examines the long history of relations between North Americans and Cubans, two peoples separated by only 90 miles. Our topics will range from baseball to guerrilla warfare, from the Mambo to the Missile Crisis. This history includes a shared commitment to anticolonial liberation; annexationist schemes among Southern slaveholders; repeated military interventions by the United States; solidarity from the U.S. with various Cuban Revolutions, including but not limited to Fidel Castro's; and two hundred years of cultural contact between African Americans and Afro-Cubans that has profoundly influenced U.S. culture, music, and sports. *Same as AFS/AMS 323.* *Gosse*

HIS 407. Selected Studies in Latin American History. (NW) (S)
Readings and research about the political, economic, social, and cultural history of Latin America. Seminar topics include "Sex and Sexuality in Latin America." *Same as WGS 407.* *Shelton*

SPA 343. Cuentos del Río de La Plata. (H)
Argentina and Uruguay are the two countries that have produced the most renowned short story writers in Spanish. It could be said that Jorge Luis Borges and Julio Cortázar constitute the paradigm of the Hispanic short story of the second half of the 20th century and later years. Both writers have set the grounds for the development of the short story as a genre in Latin America. In this course we will explore the influence of Borges and Cortázar in later Argentine and Uruguayan writers. Prerequisite: SPA 321. *Tisnado*

SPA 410. Research Seminar: El Boom Latinoamericano. (H)
The Latin American Boom is a phenomenon in the history of literary movements in the 20th Century. In this course we will read some of the

canonical pieces by authors that constitute the "boom." In so doing, we will examine the characteristics of the Latin American literary boom. We will read Alejo Carpentier, Carlos Fuentes, Gabriel Garcia Márquez and Mario Varas Llosa, as the four biggest representatives of this movement. Prerequisite: SPA 321. *Tisnado*

SPA 412. Research Seminar: El Exilio Hispanoamericano. (H)
There is a vast number of Latin Americans living mainly in several European countries, Canada, the United States, Australia and some Asian and African countries. Political turmoil of the Southern cone in the 1970s and 80s and in Central America in the 1980s and 90s, however, created generations of exiles that were political prisoners or even desaparecidos, or whose close relatives disappeared or were killed. Some of these exiles are writers who conveyed their experience in their works. In this course we will read poems, short stories, and novels written by these exiles as well as works by authors who have chosen to live abroad for other reasons. We will examine how the experience of exile shapes and is reflected in their works. Prerequisite: SPA 321. *Tisnado*

SPA 414. Research Seminar: El Detective Hispano. (H)
Why is detective fiction so popular? What makes so many readers or TV/film viewers want to read or watch murder or detective stories? What does the detective genre represent? How do we understand the surprise endings of detective stories? What variations have appeared (especially in Latin America) since the classic detective novel emerged? How can we understand these variations? In this seminar we will attempt to answer these questions through the analysis of detective fiction from Latin America. We will study detective novels in their specific Latin American context. Prerequisite: SPA 321. *Tisnado*

SPA 445. Research Seminar: Latin America on Stage. (H)
Latin America on Stage is an exploration of Latin American drama of the twentieth century, and an introduction to the experimental and newer trends in the genre. This survey course focuses on the most relevant schools, sociopolitical themes, and aesthetic practices of Latin American theater. The overall goals for the students in this course are the appreciation of the diversity of contemporary drama in the continent, as well as the development of critical skills and of oral and written modes of performance in the Spanish language. Prerequisite: SPA 321. *Ruiz-Alfaro*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

AMS 378. Border and Law Policy.
GOV 274. Latin American Political Thought.
HIS 278. Reproductive Health and Justice in Mexican History.

Off-Campus Study Programs
CET Colombia: Race, Class, Identity (Cali)
IES Abroad, Buenos Aires: Latin American Societies and Cultures
IES Abroad, Santiago: Health Studies
SIT Chile: Cultural Identity, Social Justice, and Community Development
SIT Ecuador: Development, Politics, and Languages
SIT Mexico: Migration, Borders, and Transnational Communities
SIT Peru: Indigenous Peoples and Globalization
*This is only a sample of programs available to LALS students. Reach out to F&M's Off-Campus Study office for more options.

LINGUISTICS

Professor Jessica Cox, Chair

Kimberly M. Armstrong	*Professor of Spanish and Linguistics*
Jessica Cox	*Associate Professor of Spanish and Linguistics*

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

101. Introduction to Linguistics. (H)
What is language? Is it an instinct, a behavior, an art, or a cultural artifact? Why do we talk? Why can we talk? This course examines the systematic nature of language through readings, class discussions, problem solving and group work in order to explore the core components of human language: sounds, words, sentences and meaning. Offered every Fall.
Armstrong, Cox

120. Sociolinguistics. (H)
An exploration of the relationship between language and society. Special attention will be paid to language variation (dialects, creoles and pidgins) and language in society (multilingualism, slang, language prejudice and gender). Readings, films, discussions and group work will prepare students for field work. *Armstrong*

205. Multilingualism. (H)
Most of the world speaks two or more languages and therefore is multilingual, yet in the United States, we tend to view such people as exceptions rather than the norm. Through reading and discussing social, cognitive, and educational research, we will explore different manifestations of multilingualism in and beyond the US, including situations of immigration, minoritized languages, and studying a language in the classroom. We will examine social and cognitive factors involved in learning and using two or more languages as well as effects of multilingualism on individuals and societies. No prerequisites. Offered every other year. *Cox*

207. Psycholinguistics.
This course explores language in the mind and brain, including: How do children learn their first language(s) and why is it such a different experience for an adult to learn a language? What are language disorders? Is spoken language processed differently from written language? What about sign languages? Class will include discussions, presentations, and hands-on analysis of language data. Prerequisite: LIN 101 or PSY 100. *Same as PSY 207*. *Cox*

MATHEMATICS

Professor Danel Draguljić, Chair

Annalisa Crannell	*Carmie L. and Beatrice J. Creitz Professor of Mathematics*
Iwan Praton	*Professor of Mathematics*
Wendell Ressler	*Professor of Mathematics*
Christina Weaver (on leave 2022-23)	*Professor of Mathematics*
Danel Draguljić	*Associate Professor of Mathematics*
Alan Levine (on leave Spring 2023)	*Associate Professor of Mathematics*
Michael P. McCooey	*Associate Professor of Mathematics*
Barbara E. Nimershiem	*Associate Professor of Mathematics*
Daniel R. Droz	*Visiting Assistant Professor of Mathematics*
Eva Goedhart	*Visiting Assistant Professor of Mathematics*
Heather Pasewicz	*Adjunct Assistant Professor of Mathematics*

The study of mathematics is a hallmark of enlightened society, as it has been for millennia. Mathematics helps us understand our world and ourselves, and it is fun.

Mathematics is one of the oldest of the liberal arts. The study of mathematics has been used for centuries to train students to think clearly and creatively. Mathematical applications enlighten other disciplines and inform society.

Mathematical thought requires curiosity, creativity, discipline and logic. As students progress through the mathematics curriculum, they are expected to become increasingly adept at developing conjectures, constructing correct proofs and refuting weak ones, creating and using mathematical models to describe physical phenomena, working with abstract structures and clearly communicating results.

A major in Mathematics requires completion of MAT 109, 110, 111, 211 and 229; MAT 330 and 331; one course from MAT 323, 329, 337, 339 or other courses in mathematical modeling as offered by the department; one mathematics course numbered 400 or higher, other than 490 or 491; and sufficient electives so that the total number of mathematics courses taken beyond MAT 111 is nine. One of the electives may be chosen from PHI 244, PHY 226, BIO/PBH 354, BOS 360, CHM 321, ECO 310, PSY 460, or, with approval of the department, other mathematically intensive courses; 100-level courses may not be used as electives for the Mathematics major.The writing requirement in Mathematics is met by the completion of MAT 211.

A student planning to major in Mathematics should take MAT 211 as soon as possible, no later than the first semester of the junior year. A student planning to major in Mathematics and study abroad should complete 211 before going abroad.

We suggest the following guidelines for course selection:

Students intending to pursue graduate study in mathematics should take MAT 442, 446, 490 and CPS 111. We also recommend studying at least one course of French, German or Russian.

Prospective teachers of secondary school mathematics should take MAT 216, 316, 445 and CPS 111.

Students interested in actuarial science or statistics should take MAT 215, 216, 316, 323, 338, 416 and CPS 111. We also recommend taking courses in Economics and in Business, Organizations, and Society.

Students planning to enter other fields of applied mathematics should take MAT 216, 323, 329, 337, 338, 339, 439 and 442. Knowledge of probability, statistics and computer science is essential in many areas of applied mathematics.

A minor in Mathematics may be completed in one of two tracks. The "theoretical math track" consists of MAT 110, 111 and 211; and three courses chosen from MAT 325, 330, 331, 442, 445, 446 or other theoretical courses as designated by the department. At least one of the three courses must be at the 300-level or beyond. The "applied math track" consists of MAT 110 and 111; and four courses from MAT 215, 216, 229, 316, 323, 329, 337, 338, 339, or other applied modelling courses as designated by the department. At least one of the four courses must be at the 300-level or beyond.

A joint major with Mathematics must include MAT 110, 111, 211 and 229, and at least one 300-level mathematics course. (Students who started their F&M math career in MAT 111 may apply AP credit for MAT 109 in place of MAT 110.) Remaining course choices must be addressed in the joint major rationale.

Majors in the Department of Mathematics have studied abroad in the following programs in recent years: NUI Galway, Ireland; University of Otago, New Zealand; London School of Economics; University College London; Queen Mary University London; Oxford University; IES Madrid, Spain; Flinders University, Australia; among others. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

105. Preparation for College Mathematics.
Introductory logic and algebra, elementary functions: polynomial, rational, trigonometric, exponential, logarithmic. Prerequisite: Permission of the department. Not for credit toward the mathematics major or minor. Offered every Fall. *Goedhart*

109. Calculus I.
Introduction to the basic concepts of calculus and their applications. Functions, derivatives and limits; exponential, logarithmic and trigonometric functions; the definite integral and the Fundamental Theorem of Calculus. Prerequisite: Twelfth-grade mathematics or MAT 105. *Crannell, Droz, Goedhart*

110. Calculus II.
Techniques of integration, applications of integration, separable first-order differential equations, convergence tests for infinite series, Taylor polynomials and Taylor series. Prerequisite: MAT 109 or permission of the department. *Droz, Goedhart*

111. Calculus III.
Vectors and parametric equations; functions of two variables; partial and directional derivatives; multiple integrals; line integrals. Prerequisite: MAT 110 or permission of the department. *McCooey, Nimershiem*

211. Introduction to Higher Mathematics.
A course designed as a transition from calculus to advanced mathematics courses. Emphasis on developing conjectures, experimentation, writing proofs and generalization. Topics will be chosen from number theory, combinatorics and graph theory, polynomials, sequences and series and dynamical systems, among others. Prerequisite: MAT 111. *McCooey, Nimershiem*

215. Introduction to Statistical Modeling.
This course is about the construction, analysis, and application of statistical models to real data. We emphasize the use of models to untangle and quantify variation in observed data. Basic statistical concepts such as randomness, confidence intervals, hypothesis tests, causal inference, etc., are explored in the context of statistical models which include multivariate regression, analysis of variance, and logistic regression. We use a modern statistics software package (R) throughout the course. Prerequisite: MAT109 *Draguljić*

216. Probability and Statistics I.
Introduction to single variable probability and statistics. Random variables. Binomial, geometric, Poisson, exponential and gamma distributions, among others. Counting techniques. Estimation and hypothesis tests on a single parameter. Prerequisite: MAT 110. *Praton*

229. Linear Algebra and Differential Equations.
Systems of linear equations and matrices, vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, nth order linear differential equations, systems of first order differential equations. Prerequisite: MAT 111. *Droz, Ressler*

237. Discrete Mathematics.
Basic set theory, basic proof techniques, combinatorics (the theory of counting), and graph theory with related algorithms. Prerequisite: MAT 109. *Same as CPS 237.*

245. Projective Geometry Applied to Perspective Art.
This course deals with projective geometry as applied to perspective art. In particular, we will use problems from perspective art to motivate geometric concepts. Solutions to these problems will include both simple drawings and also rigorous mathematical proofs. Mathematical topics include projective maps from three-space to the plane, Desargues' theorem, and the Fundamental Theorems of Projective Geometry. Prerequisite: MAT 111. *Crannell*

270–279. Selected Topics.
Intermediate level courses.

291. Directed Reading.
Reading directed by the Mathematics staff. Permission of chairperson.

316. Probability and Statistics II.
Continuation of MAT 216. Multivariate distributions. Estimation and hypothesis tests for multiple parameters. Regression and correlation. Analysis of variance. Prerequisites: MAT 111, MAT 216. Offered every Spring. *Praton*

323. Stochastic Processes.
Properties of stochastic processes, Markov chains, Poisson processes, Markov processes, queueing theory. Applications of stochastic modeling to other disciplines. Prerequisites: MAT 111, MAT 216. *Praton*

325. Number Theory.
Properties of the natural numbers and integers: divisibility, primes, number theoretic functions, Diophantine equations, congruences, quadratic reciprocity, additive number theory, unsolved problems.
Prerequisite: MAT 211.

329. Fourier Series.
Fourier series, orthogonal series, boundary value problems, applications. Prerequisite: MAT 229.

330. Abstract Algebra.
Algebraic systems and their morphisms including sets, functions, groups, homomorphisms, factor groups, rings and fields. Prerequisite: MAT 211. Offered every Fall. *McCooey*

331. Introduction to Analysis.
An introduction to the ideas and proof techniques specific to mathematical analysis. Real numbers, sequences, limits, derivatives, integrals, infinite series, cardinality; other topics as chosen by instructor. Prerequisite: MAT 211. Offered every Spring. *Ressler*

337. Mathematics for Optimization.
Discrete, deterministic models of interest to the social sciences. Linear programming, duality, simplex method, sensitivity analysis, convex sets. Selections from: assignment, transportation, network flow, nonlinear programming problems. Prerequisite: MAT 229. *Levine*

338. Computational Mathematics.
Numerical analysis as implemented on computers. Polynomial and rational approximations, numerical differentiation and integration, systems of linear equations, matrix inversion, eigenvalues, first and second order differential equations. Prerequisites: CPS 111, MAT 229. *Same as CPS 338.* *Weaver*

339. Mathematical Models.
An introduction to the art of creating and analyzing deterministic mathematical models. Models of physical, biological and social phenomena. Topics vary with instructor; examples are predator-prey interactions, spread of epidemics, arms races and changes in global temperature. Mathematical techniques include phase-plane analysis of systems of differential equations and function iteration. Prerequisite: MAT 229. Offered every Fall. *Levine*

370–379. Selected Topics.
Advanced Algebra, Advanced Multivariable Calculus, Measure Theory, Algebraic Topology, History and Development of Calculus, Mathematical Finance, Statistical Learning.

375. Topics in Algebra.
Courses of an algebraic nature such as Ring Theory, Advanced Linear Algebra and Algebraic Number Theory, that can be taken in place of, or in addition to, MAT 330 to satisfy the major requirements. May be repeated with permission of department. Prerequisite: MAT 211.

390. Independent Study.
Independent study directed by the Mathematics staff. Permission of chairperson.

391. Directed Reading.
Reading directed by the Mathematics staff. Permission of chairperson.

416. Design and Analysis of Experiments.
The course deals with statistical principles behind the design and analysis of experiments. Analysis of variance techniques are examined for hypothesis testing and simultaneous confidence intervals. Other topics include block designs, factorial experiments, random effects, mixed models, etc. Prerequisite: MAT 316. *Draguljić*

430. Advanced Linear Algebra.
Topics in linear algebra from abstract and geometric perspectives: real and complex vector spaces, eigenvalues and eigenvectors, inner products, canonical forms, and groups of linear transformations (rotations and their analogues). This course is appropriate for students wishing to expand their study of abstract algebra beyond MAT330, those who are intrigued by the geometry of linear transformations, and those considering graduate study in mathematics. Prerequisites: MAT 229 and MAT 330. *McCooey*

439. Nonlinear Dynamics.
Analysis of nonlinear systems of differential equations with a focus on trajectories of solutions in the phase plane. Topics include bifurcations, limit cycles, and transition to chaos. Applications to physics, biology, economics, and other fields will be explored. Prerequisite: MAT 339.
Weaver

442. Complex Analysis.
Functions of one complex variable: analytic functions; mappings; integrals; power series; residues; conformal mappings. Prerequisite: MAT 331. *Ressler*

445. Geometry.
Selections from: advanced synthetic geometry; groups of transformations; affine geometry; metric geometry; projective geometry; inversive geometry. Prerequisite: MAT 330. *Nimershiem*

446. Topology.
An introduction to topological spaces and continuous functions. Prerequisite: MAT 330. Corequisite: MAT 331. *Nimershiem*

470–479. Selected Topics.
Study of advanced specialized areas of mathematics.

490. Independent Study.
Independent study directed by the Mathematics faculty. Permission of chairperson.

491. Directed Reading.
Reading directed by the Mathematics faculty. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Slice of Pi.
Cryptography.
Introduction to Statistical Learning.
Shape of Space.

MUSIC

Professor Karen Leistra-Jones, Chair

Professor William Wright, Associate Chair for Music Performance

Sylvia Alajaji	*Professor of Music*
Matthew Butterfield (on leave 2022-23)	*Professor of Music*
Karen Leistra-Jones	*Associate Professor of Music*
Gwynne Geyer	*Artist in Residence, Voice and Teaching Professor of Music*
Doris Hall-Gulati	*Artist in Residence; Senior Adjunct Assistant Professor of Music, Clarinet and Saxophone; Chamber Music Coordinator*
Brian Norcross	*Senior Director of Instrumental Music; Senior Conducting Studies; Senior Teaching Professor of Music*
William Wright	*Choral Conductor; Teaching Professor of Music*
Kenneth Laudermilch	*Senior Adjunct Professor of Music, Trumpet*
Jessica Beebe	*Senior Adjunct Assistant Professor of Music, Voice*
Kimberly Buchar Nolet	*Senior Adjunct Assistant Professor of Music, Bassoon*
Devin Howell	*Senior Adjunct Assistant Professor of Music, Double Bass*
Michael Jamanis	*Senior Adjunct Assistant Professor of Music, Violin and Viola*
Sara Male	*Senior Adjunct Assistant Professor of Music, Violoncello*
Elizabeth Pfaffle	*Senior Adjunct Assistant Professor of Music, Horn*
Kimberly Trolier	*Senior Adjunct Assistant Professor of Music, Flute*
Mark Yingling	*Senior Adjunct Assistant Professor of Music, Percussion*
Tammi Hessen	*Senior Adjunct Instructor of Music, African Drums, African Drum Ensemble Conductor*
Julia Adams	*Adjunct Assistant Professor of Music*
Kathleen Horein	*Adjunct Assistant Professor of Music, Oboe*
Arthur Lawrence	*Adjunct Assistant Professor of Music, Organ; Nevin Chapel Organist*
Mark Livshits	*Adjunct Assistant Professor of Music, Piano*
Rosemary Blessing	*Adjunct Instructor of Music, Piano*
Chris Keeney	*Adjunct Instructor of Music, Guitar*
Anne Nye	*Adjunct Instructor of Music, Horn*
Neil Podgurski	*Adjunct Instructor of Music, Jazz Piano*
Stephen Shiffer	*Adjunct Instructor of Music, Low Brass*

The study of music at Franklin & Marshall College is as deeply embedded in the creation and performance of music as it is in the understanding that music is inextricable from the worlds it is a part of. The Department of Music provides an approach to music that models the very essence of the liberal arts: an inherently interdisciplinary pursuit that hones processes of critical inquiry and analysis while simultaneously fostering and nourishing the creative mind.

The Music major at F&M is designed to allow students with varying backgrounds in music to thrive and carve their own individual paths. Courses cover genres and cultures from around the world and can be divided into three interrelated areas: history and culture, theory and composition, and performance. The major is bookended by MUS 2xx: Music,

Culture, and Society, a gateway course designed to introduce students to foundational questions, issues, and methodologies in music studies, and by a 400-level senior project that serves as the culmination of one's studies. By way of its emphasis on electives, the major gives students an opportunity to gain depth in a category of their choosing and allows students considerable agency in designing a trajectory most in line with their strengths, areas of interest, and post-college plans. Past majors have conducted grant-funded archival research and fieldwork throughout the world; presented at academic conferences; attended internationally renowned music programs throughout North America, Europe, sub-Saharan Africa, and East Asia; performed solo recitals in F&M's own world-class Barshinger Center for Musical Arts; and conducted orchestras in programs featuring their original compositions.

Many students choose to complete a major or minor in music whether or not they intend to undertake a career in music. The writing, analytical, critical thinking, and creative skills that the major and minors foster undoubtedly play a pivotal role no matter a student's post-college trajectory. Students who have graduated with degrees in Music not only have gone on to Ph.D. programs in Musicology, Ethnomusicology, and Composition and successful careers in performance and the music industry but have also gone on to careers in medicine, law, and computer science (to name only a few).
The majority of courses in the Music Department are open to students with no formal background in music while all of its ensembles are open to the entire student body. At the same time, there are many offerings in the academic and performance realms for students who have already made music an important element of their lives.

A major in Music consists of 10 course credits:

MUS 272: Music, Culture, and Society (as this course functions as a gateway into the major, students are encouraged to take it as early in their course of study as possible)

Three credits in Music Theory and Composition: MUS 278: Tools and Concepts of Theory and Composition; MUS 224: Musicianship 1 [half-credit] and MUS 225: Musicianship 2 [half-credit]; and one elective in Theory and Composition at the 200-level or higher.

Three credits in History and Culture: two electives at the 200-level and one elective at the 300-level

One credit in Music Performance, drawn from studio lessons, ensembles, or conducting

One 300-level elective drawn from either History and Culture or Theory and Composition

MUS 490: Independent Study or MUS 38x-48x Senior Recital

Students considering a major in Music are strongly encouraged to design their course of study with the guidance of the Music Department Chair (or other designated advisor from the Music faculty) as early as possible and to pick a selection of electives that provides appropriate breadth and depth.

The major culminates in a recital, research project, or creative project of the student's choosing, typically completed in the student's senior year. Students are strongly encouraged to start discussing the plans for their senior project with their advisors by the spring semester of their junior year. Students who would like to be considered for Honors should begin this process early in their junior year as well.

The writing requirement in the major is met by the completion of MUS 2xx: Music, Culture, and Society and by taking 200- and 300-level electives in History and Culture.

Students majoring in music are encouraged to participate in one of the College's choral or instrumental ensembles for at least four semesters.

Majors in the Department of Music have studied abroad in the following programs in recent years: IES programs in Milan, Italy and Vienna, Austria. See the International Programs section of the Catalog for further information.

A general minor in Music consists of six course credits:

MUS 272: Music, Culture, and Society (as this course functions as a gateway into the minor, students are encouraged to take it as early in their course of study as possible);

Two credits in Music Theory and Composition: MUS 278: Tools and Concepts of Theory and Composition; MUS 224: Musicianship 1 [half-credit] and MUS 225: Musicianship 2 [half-credit];

Two History and Culture credits at the 200-level or above;

One 300-level elective drawn from either Theory and Composition or History and Culture.

A performance minor in Music consists of six course credits:

MUS 272: Music, Culture, and Society (as this course functions as a gateway into the minor, students are encouraged to take it as early in their course of study as possible);

One additional credit in History and Culture at the 200-level or higher;

One and one-half credits in Music Theory and Composition: MUS 278: Theory and Composition 1: Tolls and Concepts and MUS 224: Musicianship 1 [half-credit];

Two and one-half performance credits selected in consultation with the department chair. Ideally, the performance credits should include courses selected from both ensembles and studio lessons given at the College. If such diversification is not possible, the chair may recommend another performance-oriented course (such as conducting).

A maximum of four transferred credits from another institution may be counted toward the major, and of these, no more than one may be at or above the 300-level. Two transferred credits may be counted toward the minor. Further details about transferred credits can be obtained from the chair of the department.

Majors in the Department of Music have studied abroad in the

following programs in recent years: IES programs in Milan, Italy and Vienna, Austria. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

COURSES IN MUSIC HISTORY/CULTURE AND THEORY

100. Fundamentals. (A)
A first course in music for students with little or no formal training or background. Emphasis on basic musicianship, including keyboard orientation and the ability to read and sing simple melodies in treble and bass clefs, in both major and minor modes and in a variety of meters. Additional topics include the notation of pitch and rhythm, scales, key signatures, time signatures, intervals, triads, and basic score navigation. No musical background is required. *Wright*

101. Introduction to Music. (A)
Survey of Western art music designed to develop perceptive listening, with emphasis on the study of rhythmic, melodic, and harmonic organization, color, texture, and form. No musical background is required. *Leistra-Jones*

102. Introduction to World Music. (A) (NW)
Survey of music from a global perspective with emphasis on the study of music's relation to culture. Includes cross-cultural comparison of music's rhythmic, melodic and harmonic organization, in addition to color, texture and form. Features case studies from Africa, the Americas, Europe, and Asia. No musical background required. Students who already read music should enroll in MUS 229.) *Alajaji*

105. Jazz. (A)
The history of jazz, from its roots to the present day, with emphasis on stylistic distinctions. Considers African and European contributions, blues types, New Orleans jazz, Harlem Stride, Swing, bebop, cool jazz, hard bop, free jazz, fusion, neo-classical, and acid jazz, touching on most major figures and their contributions. Each stylistic period is studied from an economic and sociological viewpoint with emphasis on form, texture, improvisation, harmony, rhythm, and timbre.
Same as AFS 105 and AMS 105. *Butterfield*

106. History of the Blues. (A)
Blues history from its origins to the Blues Revival of the 1960s. Emphasis on the Delta blues tradition of Charley Patton, Robert Johnson, and Muddy Waters. Additional topics include: oral formulaic composition; politics of race and sex in the blues; the blues as a "secular religion"; the music business; appropriations of blues style in jazz and rock; the ongoing function of the blues as a core signifier of "blackness" in American culture. *Same as AFS 106 and AMS 106.* *Butterfield*

107. Composing. (A)
Introduction to musical composition through the study of development and proportion and the creation of three short compositions for small instrumental and/or vocal ensembles culminating in a final project. Faculty performers will read and discuss student works and concert attendance will provide topics for two short research papers centered on aspects of the compositional process. Ability to read music required. *Staff*

108. Jazz Theory and Improvisation. (A)
An introduction to jazz theory and its application in improvisational practice. Emphasis on jazz harmony, including chord-scale theory and its use in selected jazz "standards" and common forms such as 12-bar blues and "rhythm changes". Exercises in transcription and analysis of classic solos by Lester Young, Charlie Parker, Miles Davis, and others introduce students to a wide variety of approaches to jazz improvisation. Students will apply theoretical concepts learned in class to performance on their own instruments in order to develop improvisational skill and a personalized jazz melodic vocabulary. Ability to read music and competence on a musical instrument (including voice) required. Prerequisite: MUS 100 or 222, or permission of the instructor. *Staff*

215. Composition. (A)
Fundamentals of musical composition based on appropriate models. Projects for solo instrument, voice, or small ensembles will emphasize individual elements of music: form; rhythm; melody; harmony; and texture. Prerequisite: MUS 100, MUS 222, or permission of the instructor. *Norcross*

222. Theory 1: Basic Harmony and Form. (A)
Beginning with a review of fundamentals, the course covers harmonization in four parts, voice-leading, modulation, and the composition of short binary pieces or variations. The ability to read music in both treble and bass clefs is required, as is a rudimentary knowledge of scales, key signatures, and intervals. Students are advised to take MUS 222 and MUS 224 concurrently. *Butterfield*

223. Theory 2: Advanced Harmony and Form. (A)
Chromatic harmonic practices, including enharmonic modulations and altered chords. Composition and analysis of rondo or sonata forms. Prerequisite: MUS 222; students are advised to take MUS 223 and MUS 225 concurrently. *Butterfield*

224. Musicianship 1. (A)
The course develops ear-training by way of melodic, harmonic, and rhythmic dictation, and sight-singing. The ability to read music in both treble and bass clefs is required, as is a rudimentary knowledge of scales, key signatures, and intervals. Students are advised to take MUS 222 and MUS 224 concurrently. (one half credit) *Wright*

225. Musicianship 2. (A)
The continuation of MUS224. Additional topics include modulation and score reading (one-half credit). Prerequisite: MUS224. *Wright*

226. Popular Musics and Societies. (A)
This course will survey selected popular musics from around the world. Our goal is to understand these musics as phenomena of time and place and to engage them in their cultural contexts, examining the way they encounter the political, historical, and social realities of the societies that produce them. Genres to be studied include hip-hop, reggae, Afropop, bhangra, nueva canción. Ability to read music required. *Alajaji*

228. Middle Eastern Music and Culture. (A) (NW)
This interdisciplinary course will explore the musical identities of the Middle East and North Africa in terms of the complex sociological, historical, and political processes that have shaped the region. We will proceed from the idea that music is a powerful agent in the negotiation of power and identity, and examine the ways in which it has been utilized throughout transformative periods of history. Particular attention will be given to the transnational and diasporic nature of the musics under consideration. Classical, folk, and popular musical traditions will be considered, as will the roles of art, popular culture, and mass media.
Same as IST 228. *Alajaji*

229. Music in Cultural Perspective. (A) (NW)
A study of the notion and role of music in selected music cultures. After exploring key concepts associated with music's universal functions, the course will study rhythm, melody, timbre, texture, harmony, form, and transmission from a cross-cultural perspective. Ability to read music required. *Alajaji*

230. Music History 1: Antiquity to 1750. (A)
Western art music from early Gregorian chant through the florid art of the Baroque period. Includes the major stylistic developments as found in the works of Josquin, Monteverdi, Bach, Handel, and other composers. Ability to read music required. *Leistra-Jones*

231. Music History 2: 1750 to Present. (A)
The stylistic development of Western art music in the Classical, Romantic, and Modern eras. Selected works from each era are the focal point of the study. Ability to read music required. *Leistra-Jones*

238. Song Cycles. (A)
Song cycles—collections of songs unified by a common theme, narrative, or viewpoint—often tell stories. Specifically, they tell stories of individuals' journeys (both inward and outward), transformations, and changing impressions, and they do so not only through poetry, but also through music. This course examines representative song cycles from three important moments in cultural history: German Romanticism (the early nineteenth century), the fin-de-siècle (the years surrounding 1900), and the 1960s and 70s. Within these periods we will examine cycles by a wide range of composers, including Beethoven, Schumann, Mahler, Elgar, George Crumb, and Joni Mitchell. Throughout, our emphasis will be on different conceptions of human subjectivity and the relationship between music and poetry. Prerequisite: MUS 100 or equivalent or permission.
Leistra-Jones

239. Hip Hop: The Global Politics of Culture. (H) (NW)
This course will engage in hip hop's "politics of authenticity" while also offering a primer on the participation and contributions of a variety of transnational, sexual, gender, and racial/ethnic constituents. Rightfully centering and honoring the genre's Afro-diasporic influences, we will examine debates involving transnationalism, gender, sexual, and racial boundaries in hip hop. We will also explore hip hop's global relevance, such as its sonic and cultural presence in reggaetón and its spread as a global dance form. Overall, this class will prompt students to untangle hip hop's seemingly contradictory ethos of "keeping it real" while simultaneously promoting broader ideals of cosmopolitanism and global commodification. *Same as AMS 239.* *Villegas*

301. Pops & Jelly Roll:
New Orleans and Its Music in the Early Twentieth Century. (A)
An examination of Louis Armstrong and Jelly Roll Morton's New Orleans. The course evaluates their music and the more general style of early New Orleans jazz in relation to the geographical, social, political, and economic dynamics of that great American city in the early 20th century. Particular attention will be given to the social and musical interactions among New Orleans' disparate ethnic groups that led to the formation of a unique style of jazz derived from ragtime, blues and the ubiquitous marching band music from that era. *Same as AFS 301 and AMS 301.* *Butterfield*

302. Bebop. (A)
A history of the bebop movement in jazz of the 1940s and '50s. Special attention given to the social, economic, and political conditions that led a small handful of musicians to abandon Swing Era big bands in favor of the small combos that formed out of Harlem jam sessions between 1941-1943. Covers distinguishing features of the bebop style through an examination of the music of Charlie Parker, Dizzy Gillespie, Thelonious Monk, and others. Concludes with an evaluation of the social and political meanings of bebop and its historical legacy.
Same as AFS 302 and AMS 302. *Butterfield*

315. Orchestration. (A)
Covers the ranges, capabilities, and characteristic uses of orchestral instruments through exercises, score study, and listening, and implements this knowledge in transcriptions and arrangements for a variety of ensembles in a variety of historical styles. Prerequisites: MUS 223 or permission.
Staff

322. Counterpoint. (A)
The art of 18th-century counterpoint will be studied through the analysis of masterworks by J. S. Bach and others. Beginning with species and invertible counterpoint, followed by canonic writing, compositions will then include short binary pieces, inventions and fugues. Prerequisite: MUS 223 or permission of the instructor. *Staff*

323. Theory 3: Chromatic and Post-Tonal Vocabularies. (A)
Analytical study of the rhythmic, harmonic, and formal practices of Debussy, Stravinsky, Bartók, Schoenberg, Messiaen, and other composers of the last century. Includes atonal and serial music, with an introduction to set theory. Composition of short pieces using course materials. Prerequisite: MUS 223 or permission of the instructor. *Butterfield, Staff*

430. Music Criticism. (A)
A seminar studying various genres of writing about music including musical diaries, analyses, musicological essays, program notes, and reviews of performances. Major works being performed in New York City or on campus provide the central repertory for the seminar. Satisfies the writing requirement in the music major. Prerequisites: MUS 230, MUS 231, MUS 222, or permission of the instructor. *Staff*

490. Independent Study.
Independent study directed by the music staff. Permission of the chairperson.

COURSES IN MUSIC PERFORMANCE

240. Conducting. (A)
An introduction to conducting. Students develop skills in score study, aural discrimination, and gestural expression, and learn strategies for ensemble rehearsal. Final project is to rehearse and conduct a performance of a large College ensemble. Course includes an individual weekly lesson and two weekly master classes. Students enrolling in Conducting are expected to be able to read music in both treble and bass clefs, and to have a basic knowledge of music theory with respect to key signatures (both major and minor), time signatures (both simple and compound), and basic chord progressions. *Norcross*

340. Advanced Conducting. (A)
The course is an advanced study of conducting including score study techniques, conducting gestures, rehearsal strategies, as well as aural discrimination and interpersonal skills. This course includes an individual one-hour lesson and a two-hour master class. Class members will prepare and perform a piece with an F&M ensemble. Prerequisite: MUS 240 and permission of the instructor. *Norcross*

One half credit for participation in the following performing ensembles is accumulated over any consecutive two-semester sequence and is awarded at the end of the second semester of participation; students who wish to receive credit should enroll in the 100-level course in the first semester of participation and the 200-level course in the second. One full credit is needed to satisfy the Arts exploration requirement for graduation.

150, 250. The Franklin & Marshall College Chorus. (A)
A large choral group of approximately 80 singers that concentrates on the masterpieces of the choral repertory, both a capella and with orchestra. Two rehearsals per week. Prerequisite: Permission of the director. *Wright*

151, 251. The Franklin & Marshall Chamber Singers. (A)
A select vocal ensemble of 24 singers selected by audition. Repertory includes music from a wide range of musical styles and time periods. In addition to on-campus performances, the group embarks on annual tours. Two rehearsals per week. Prerequisite: Permission of the director. *Wright*

152, 252, 352, 452. The Franklin & Marshall Orchestra. (A)
A full orchestra with approximately 70 performers focusing on masterpieces of the orchestral repertoire. Two rehearsals per week. Members at the 300 and 400 level also participate in the F&M Philharmonia, a flexible instrumentation small orchestra, wind ensembles and percussion ensemble. This ensemble rehearses Monday and Wednesday evenings from 7-10 p.m. Prerequisite: Permission of the director. *Norcross*

153, 253. 353, 453. The Symphonic Wind Ensemble. (A)
A large ensemble for woodwinds, brass and percussionists with approximately 50 performers. Repertory ranges from masterworks of the concert band tradition to new works written for wind ensemble. Two rehearsals per week. Members at the 300 and 400 level also participate in the F&M Philharmonia, a flexible instrumentation small orchestra, wind ensembles and percussion ensemble. This ensemble rehearses Monday and Wednesday evenings from 7-10 p.m. Prerequisite: Permission of the director. *Norcross*

155, 255. The Jazz Ensemble. (A)
Performs music from big band to progressive jazz. Prerequisite: Permission of the director. *Staff*

156, 256. Chamber Music. (A)
Chamber Music is designed for advanced instrumental music students to experience music written for generally 3 to 8 players. These small ensembles require high artistic demands of all of the ensemble members, as each player is essentially a soloist. Ensembles in this program rehearse a minimum of twice a week for a total of not less than three hours a week. One of the two rehearsals each week is coached by a professional chamber music coach. The ensemble is expected to perform in an appropriate concert at least once a semester. Prerequisite: Permission of the director. *Hall-Gulati*

157, 257. African Drum Ensemble. (A)
An ensemble of up to 20 performers focusing on West African drumming techniques and the philosophy behind them. Two rehearsals per week Prerequisite: Permission of the director. *Same as AFS 157, 257. Hessen*

In addition to the credit-bearing courses above, faculty-directed, non-credit performance opportunities such as opera workshop and the pep band are also a part of musical life at the College.

Studio lessons receive one half credit per semester at the 200-level and one half credit after two semesters at the 100-level. Lessons at the 100-level and at the 200-level may be repeated. One full credit is needed to satisfy the Arts exploration requirement for graduation.

Studio lessons at the 100-level will include 12 30-minute lessons over the course of the semester. Students will earn 0.5 credits after taking two consecutive semesters of lessons. Students will not be required to participate in masterclasses, but at the end of the second semester they will give an adjudicated performance as part of the studio's recital. The fee for 100-level lessons will be $456/semester.

Studio lessons at the 200-level will include 12 50-minute lessons over the course of the semester. Students will earn 0.5 credits each semester. They will participate in three masterclasses each semester and will give an adjudicated performance as part of the studio's recital. The fee for 200-level lessons will be $760/semester.

The semester before a Senior Recital (only), students may enroll for lessons at the 300 level as "Recital Preparation" (e.g., MUS 385 Recital Preparation: Voice). Prerequisite: a minimum of two semesters of credit-bearing lessons in the same instrument at the 200 level.

The semester of a Senior Recital (only), students may enroll for lessons at the 400 level as "Senior Recital" (e.g., MUS 485 Senior Recital: Voice). Prerequisite: one semester of Recital Preparation at the 300 level.

180, 280 A. Flute. (A)
Private lessons and masterclass in Flute. Admission by audition with the instructor. *Trolier*

180, 280 B. Oboe. (A)
Private lessons and masterclass in Oboe. Admission by audition with the instructor. *Horein*

180, 280 C. Bassoon. (A)
Private lessons and masterclass in Bassoon. Admission by audition with the instructor. *Buchar Nolet*

180, 280 D. Clarinet. (A)
Private lessons and masterclass in Clarinet. Admission by audition with the instructor. *Hall-Gulati*

180, 280 E. Saxophone. (A)
Private lessons and masterclass in Saxophone. Admission by audition with the instructor. *Hall-Gulati*

181, 281 A. Trumpet. (A)
Private lessons and masterclass in Trumpet. Admission by audition with the instructor. *Laudermilch*

181, 281 B. Horn. (A)
Private lessons and masterclass in Horn. Admission by audition with the instructor. *Nye*

181, 281 C. Low Brass. (A)
Private lessons and masterclass in Low Brass. Admission by audition with the instructor. *Shiffer*

182, 282 A. Violin. (A)
Private lessons and masterclass in Violin. Admission by audition with the instructor. *Jamanis*

182, 282 B. Viola. (A)
Private lessons and masterclass in Viola. Admission by audition with the instructor. *Jamanis*

182, 282 C. Cello. (A)
Private lessons and masterclass in 'Cello. Admission by audition with the instructor. *Male*

182, 282 D. Double Bass. (A)
Private lessons and masterclass in Double Bass. Admission by audition with the instructor. *Howell*

183, 283 A. Percussion. (A)
Private lessons and masterclass in Percussion. Admission by audition with the instructor. *Yingling*

183, 283 B. African Drumming. (A)
Private lessons and masterclass in African Drumming. Admission by audition with the instructor. *Same as AFS 283 B. Hessen*

184, 284 A. Piano. (A)
Private lessons and masterclass in Piano. Admission by audition with the instructor. *Livshits*

184, 284 B. Jazz Piano and Improvisation. (A)
Private lessons and masterclass in Jazz Piano and/or jazz improvisation (any instrument). Admission by audition with the instructor. *Podgurski*

185, 285. Voice. (A)
Private lessons and masterclass in Voice. Admission by audition with the instructor. *Geyer, Beebe*

186, 286. Guitar. (A)
Private lessons and masterclass in Guitar. Admission by audition with the instructor. *Keeney*

The Music Department also offers private non-credit lessons for a fee in the above areas through its "Artist/Teacher Program." Non-credit lessons are available with the same fee structure as credit lessons, but without the expectation that students will play in recitals or masterclasses. Individual instructors may invite non-credit students to perform on these occasions at their discretion.

Students with a financial aid package may request the Student Aid Office to take this fee into account in their aid award.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Music, Society, and Culture. *Alajaji*
Music in the Twentieth Century. *Leistra-Jones*
Theory 1: Tools and Concepts. *Adams*
Middle Eastern Music and Culture. *Alajaji*
Global Popular Music. *Alajaji*
Women in Music. *Leistra-Jones*
Anthropology of Music. *Alajaji*
Song Cycles and Concept Albums. *Leistra-Jones*

PHILOSOPHY

Professor Nick Kroll, Chair

Bennett W. Helm	*Dr Elijah E. Kresge Professor of Philosophy*
Stephan A. Käufer	*John Williamson Nevin Memorial Professor of Philosophy*
Lee Franklin	*Associate Professor of Philosophy*
Nick Kroll	*Associate Professor of Philosophy*
David Merli	*Associate Professor of Philosophy*

Most philosophy fits into one of four loose and overlapping groups. The first studies action: What should we do and how can we get ourselves to do it? This group includes ethics and social and political philosophy. A second group studies the nature and reliability of our knowledge. Here you'll find epistemology and philosophy of science. A third group investigates the nature of the world and the self: What does it mean for something to exist? What distinguishes things from their properties? What (besides a body and a social security number) is a person? This group includes metaphysics and the philosophy of mind. A fourth group analyzes symbolic systems through which humans represent meaning to themselves and to each other. These are studied in logic and the philosophy of language.

You could easily narrow these four fields to two, or expand them to 17. Philosophy has no single topic, but at the same time every part of philosophy is connected with every other in countless ways. It is hard to talk about what there is in the world without also analyzing how we can know about it, so metaphysics and epistemology often overlap. Some claim that without language humans can't know anything, so epistemology and philosophy of language come together. If you want to study why people act the way they do, you'll draw on ethics as well as philosophy of mind; the two merge in moral psychology. And so forth. Philosophy also analyzes the social and historical conditions that make it possible to ask such questions in the first place. Philosophy, therefore, always includes a study of its own history.

The Philosophy program at Franklin & Marshall aims to acquaint students with all of these areas of philosophy by examining the great historical traditions in philosophy as well as a broad range of contemporary issues and topics in philosophy. In addition, students are encouraged to cultivate skills in critical thinking and philosophical argument with the goal of helping them to become participants in the philosophical enterprise. Lower-division courses in the department aim to provide students with a broad background in the history of philosophy and contemporary problems in philosophy, while upper-division courses seek to engage students in discussion concerning cutting edge scholarship in the field. The work of philosophy majors culminates in the senior year when students compose a senior thesis in the context of the Senior Research Seminar. Majors have the further option of expanding senior theses with the goal of presenting the project for departmental honors.

A major in Philosophy consists of 11 courses. Requirements are:

PHI 244.

One core history course from PHI 210, 213, 271, 317, 381 or 382.

One value theory course designated (V).

One course in metaphysics, epistemology, philosophy of language, or philosophy of mind designated (ME).

Two semesters of PHI 301 (each semester is .5 credit)

Five electives.

At least four courses besides PHI 301 must be numbered 300 or higher. At most, two courses may be numbered below 200.

The department's program heavily emphasizes critical thinking, logically correct reasoning and clear, concise writing. The writing requirement in the Philosophy major is met by completion of the normal courses required to complete the major.

A minor in Philosophy requires six Philosophy courses, which must include: PHI 244; either PHI 210, 213, or 317; PHI 301 and three other Philosophy electives that are approved by the chairperson or designee. At least two courses total must be numbered 300 or above. At most, one course may be numbered below 200.

Majors in the Department of Philosophy have studied abroad in the following programs in recent years: Sarah Lawrence College Program, Oxford University; F&M in Italy; F&M Travel Course in Tohoku Gakuin, Japan; SEA Semester; American Jr. Year in Heidelberg Program. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

100. Introduction to Philosophy. (H)
Examination of traditional philosophical problems of method, knowledge, the nature of reality, religious belief and ethics. *Staff*

122. Introduction to Moral Philosophy. (H)
Survey of attempts to understand the nature and significance of moral thought. Theories will be assessed in part in light of current controversies, which may include capital punishment, freedom of expression, and the limits of state authority. *Merli*

130. Good Reasons. (H)
We aim to have good reasons for the beliefs we have and the decisions

we make. Our class is about acquiring skills to accomplish this goal. We draw from a wide array of disciplines (including philosophy, cognitive psychology, behavioral economics, and decision theory) to address questions such as: What kinds of mental processes are involved in reasoning? What makes a line of reasoning valid or strong? Why do people tend to become more certain of the views they started with? Are there strategies we can use to avoid common errors in reasoning? What is evidence, and how does it interact with our background knowledge? What are the features of a community that respects good reasons? *Kroll*

170–179. Special Topics. (H)
An introductory-level course on a topic chosen by the instructor. Topic changes from year to year. May be taken more than once.

210. Ancient Greek Philosophy. (H)
How should one live? What is happiness for a human being? These questions are the focus of the philosophy of Socrates, Plato, and Aristotle. In the work of these thinkers, such questions lead to wide ranging philosophical inquiry in ethics, moral psychology, epistemology, metaphysics, political theory, aesthetics, and beyond. This course surveys their main arguments and theories, which became the cornerstone of the western European philosophical tradition. *Same as CLS 210.* *Franklin*

213. 17th- and 18th-Century Philosophy. (H)
In the 17th and 18th centuries, scientists and philosophers emerged from the scholastic traditions of the middle ages to develop the modern scientific world view and a new understanding of our own constitution and abilities. Ranging from astronomy, optics, and geometry to metaphysics, religion, and ethics, this course will study texts by the experimenters, princesses, and lens-grinders who shaped this period. *Käufer*

217. Existentialism. (H)
Existentialism is a label for a loose grouping of writers who investigate the personal and individual nature of our relation to the world and to others. They focus especially on questions about truth, commitment, responsibility, freedom, and death. This class surveys some key texts in the existentialist tradition and traces the emergence of existentialist concerns in the history of philosophical thought. *Käufer*

218. Nietzsche. (H)
In-depth study of Nietzsche's thought through close reading of his major writings. *Käufer*

220. Moral Theory. (H) (V)
A careful study of classic texts in moral philosophy, with an emphasis on questions about the foundations of ethics and the objectivity of moral judgment. *Merli*

223. Biomedical Ethics. (H)
A survey of ethical issues related to developments in biology and medicine, including controversies at the beginning and end of life, autonomy and informed consent, and limits on medical research. *Same as STS 223.*
Merli

225. History of Political Philosophy. (H)
This course introduces classic texts of Western political philosophy. Topics include the role of the state and the extent of its legitimate power over citizens, the nature of property rights, and the nature and origin of our norms of justice. We also read contemporary texts that speak to the themes of the classic texts and that address modern concerns such as poverty, global justice, and personal liberty. *Staff*

227. Contemporary Political Philosophy. (H) (V)
This course surveys contemporary debates in political philosophy. Topics may include the foundations of liberalism and democracy, feminist and antiracist critiques of liberalism, the case for various kinds of equality, the challenge of global justice, and multiculturalism and minority group rights.
Staff

235. Philosophy of Religion. (H) (ME)
In this course we will survey both perennial and contemporary topics in the philosophy of religion, such as, arguments for the existence of God, the problem of evil, the coherence of divine attributes, and the consistency of freedom and foreknowledge. We will approach these questions using both classical and contemporary texts.

236. Language, Knowledge and Reality. (H) (ME)
This class is an advanced, but accessible, introduction to two central branches of philosophy: epistemology and metaphysics. Epistemology, loosely characterized, is the study of knowledge, evidence, and rationality. Metaphysics, even more loosely characterized, is the study of the general features of reality. We'll work through some of the central topics that fall under these two studies, paying careful attention to how foundational questions about the nature of language interact with questions in epistemology and metaphysics. *Kroll*

238. Bad Language: Meaning and Use. (H) (ME)
Language allows for a cooperative exchange of information. But, as we all know, cooperation is an ideal that is often met. There is also much more to language than asking and answering questions. Our class will investigate language that doesn't fall into the "cooperative exchange of information" model. Topics include lies, bullshit, slurs, pejoratives, lexical effects, stereotypes, presupposition, linguistic oppression, silencing, consent, and testimony. *Kroll*

244. Symbolic Logic. (H)
Deductive reasoning, emphasizing primarily symbolic; some discussion of issues in the philosophy of logic. *Kroll*

250. Philosophy of Mind. (H) (ME)
A general introduction to the philosophy of mind, addressing four key philosophical issues: the nature of psychological explanation; the mind-body problem; the possibility of artificial intelligence; and the nature of persons. Prerequisite: one course in PHI or PSY or SPM. *Helm*

270–279. Special Topics. (H)
An intermediate-level course on a topic chosen by the instructor. Topic changes from year to year. May be taken more than once.

301. Current Work in Philosophy.
This course directly engages students in the collective practice of doing philosophy while introducing them to current philosophical research. We will bring leading scholars to campus with each scholar delivering a public lecture, followed by a small colloquium or workshop that brings students directly into conversation with the visitor. Prior to each visit, we will cover readings related to the scholar's current research and have a discussion session to prepare for entering the conversation with the scholar. Prerequisite: 2 prior philosophy classes. One half credit. *Staff*

317. Kant and Hegal. (H)
Close examination of the two most important and influential views of the German idealist tradition: Kant's critical philosophy and Hegel's historicist reaction to it. Prerequisite: one prior course in philosophy, or permission of the instructor. *Käufer*

319. 20th-Century Continental Philosophy. (H)
Close examination of emergence of modern phenomenology and hermeneutics. with particular attention to Heidegger's *Being and Time*. Prerequisite: one prior course in philosophy, or permission of the instructor. *Käufer*

320. Normative Ethics. (H) (V)
Survey of theories of right and wrong action, including examination of related questions concerning the good, well-being, obligation, etc. Literature will include defenses and criticisms of consequentialism, deontology and virtue ethics. Prerequisite: one prior course in philosophy, or permission of the instructor. *Merli*

321. Meta-ethics. (H) (V)
Examination of the metaphysics, epistemology and semantics of moral discourse. Topics include objectivity of moral judgment, varieties of realism and anti-realism, cognitivism and competing accounts of practical rationality. Prerequisite: one prior course in philosophy, or permission of the instructor. *Merli*

331. Free Will. (H) (ME)
An examination of contemporary theories concerning the nature of free

choice. Special attention is given to the nature of moral responsibility and the relationship between free choice and determinism. Prerequisites: one prior course in philosophy, or permission of the instructor. *Kroll*

335. Belief and Knowledge. (H) (ME)
Investigation of some issues in contemporary epistemology, including the competing analyses of the concept of justification, the case for skepticism, and the analysis of the concept of knowledge. Prerequisite: one prior course in philosophy, or permission of the instructor. *Kroll*

336. Metaphysics. (H) (ME)
Metaphysics asks what the most general features of the world are, why there is a world that has those features and how we human beings fit into that world. Examples of topics to be considered include: Is there a real, physical world outside the mind? What is the nature of time? What is required for things to persist through time? What is the nature of causation? Why does anything at all exist? Have we free will? Prerequisite: one prior course in philosophy, or permission of the instructor. *Kroll*

337. Philosophy of Natural Science. (H) (NSP) (ME)
The goals, methods, assumptions and limitations of natural science. Special attention will be paid to the philosophy of psychology, cognitive science and evolutionary biology. Prerequisite: one prior course in philosophy, or permission of the instructor. *Same as STS 337.*

339. Philosophy of Language. (H) (ME)
Investigation, based on contemporary writings, of the diverse functions served by language, of its conceptual presuppositions, and of its relationships to other symbolic media. *Kroll*

342. Rational Choice. (H) (ME)
An introduction to decision theory; topics include the rationality of the policy of nuclear deterrence, the rationality of pursuing self-interest in every situation, the impossibility of devising a democratic voting procedure, the irrationality of accepting all that is probable, and others. Less frequently offered.

351. Mind-Body Problem. (H) (ME)
A philosophical examination of the apparently problematic relationship between the mind and the natural world. Prerequisite: One prior Philosophy course or permission. *Helm*

352. Philosophy of Emotions. (H) (ME)
Detailed philosophical investigation of the emotions, focusing on the implications the study of emotions has for the mind-body problem, the nature of consciousness and intentionality, and the nature of rationality. How are emotions related to other mental states like beliefs, desires, and bodily sensations? What distinctive contribution, if any, do the emotions make to our mental lives? Prerequisite: one prior Philosophy course. *Helm*

353. Phenomenology and Cognitive Science. (H)
In-depth study of phenomenology, covering both its history and contemporary debates, and phenomenology-inspired research in cognitive science and psychology. Prerequisite: One prior Philosophy course and one prior Psychology course. *Same as PSY 353.* *Käufer*

360. Concept of a Person. (H) (V)
A careful examination of what it is to be a person, as an autonomous moral agent whose life can be meaningful, and of what distinguishes persons from the "lower" animals. Prerequisite: one prior Philosophy course. *Helm*

361. Moral Psychology. (H) (V)
Moral psychology is the study of human moral agency. As such, it is constrained by, and must cohere with, the facts about human psychology; but its primary focus is on human good, an evaluative notion. Central questions include: What are reasons and what role do they play in action? What is character and how is it related to virtue? What is free will, can we have it, and how do we best explain weakness of the will? Prerequisite: One prior Philosophy course or permission. *Helm*

362. Love and Friendship. (H) (V)
Investigation of philosophical aspects of love and friendship, examining a variety of accounts of what they are as well as questions concerning their justification, their bearing on the autonomy and identity of the individual, and the place their value has within a broader system of the values, including moral values. Prerequisite: one prior Philosophy course. *Same as SPM 362.* *Helm*

363. Respect, Responsibility, and Ethics. (H) (V)
Recently many philosophers have argued that certain interpersonal emotions, such as resentment, indignation, guilt, gratitude, and approbation, are fundamental to a host of interconnected issues in ethics, including the nature of respect, dignity, freedom and responsibility, and the origins of moral values. This class will closely examine these claims and arguments with the aim of understanding more clearly how moral psychology and metaethics intersect. Prerequisite: one prior Philosophy course. *Helm*

370–379. Special Topics. (H)
An intermediate- or advanced-level course on a topic chosen by the instructor. Topic changes from year to year. May be taken more than once.

381. Plato. (H)
An intensive treatment of some of the major philosophical themes in selected dialogues of Plato. Prerequisite: one prior Philosophy course. *Same as CLS 381.* *Franklin*

490. Independent Study.
Independent study directed by the Philosophy staff. Permission of the chairperson required.

498. Philosophical Research.
Intensive research and writing on a topic of the student's choice carried on in a seminar setting. Includes several oral presentations by each student. Permission of instructor is required. Offered every Fall. *Staff*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Philosophy of Law.
Philosophy of Education.
Philosophy of Psychiatry.
Ancient Metaphysics.
End of Life Ethics.

PHYSICS AND ASTRONOMY

Professor Etienne Gagnon, Chair

Gregory S. Adkins	*William G. and Elizabeth R. Simeral Professor of Physics*
Fronefield Crawford III	*Charles A. Dana Professor of Physics and Astronomy*
Calvin Stubbins	*Professor of Physics*
Etienne Gagnon	*Associate Professor of Physics*
J. Kenneth Krebs	*Associate Professor of Physics*
Amy L. Lytle	*Associate Professor of Physics*
Deborah Schmidt	*Assistant Professor of Physics and Astronomy*
Ryan Trainor	*Assistant Professor of Physics*
Elizabeth Praton	*Senior Adjunct Assistant Professor of Physics and Astronomy*

The Department of Physics and Astronomy offers two majors: Physics and Astrophysics. The Physics major has two concentration tracks: Physics and Computational Physics."

Who is physics for?

Physicists and astrophysicists are curious about the nature of the physical universe. They enjoy asking complex questions and tackling difficult problems, from the highly practical and applied to the truly fundamental. Ultimately, they use their unique perspective and analytical abilities to understand and influence the world around them.

Those with a background in physics can be found making significant contributions in many different communities. Some engage in basic research. Many become teachers at all levels and/or engage in outreach and science communication. Others bring their skills and knowledge to different areas of interest, becoming analysts, lawyers, doctors, and engineers or working to improve the world in other ways.

What is physics?

Physics allows us to interrogate complicated natural systems, explain our observations, and model future behavior. Through the studies of forces, interactions, theories, and conservation laws, students of physics and astrophysics reshape the way we perceive the natural world. From the beauty of a rainbow to the origins of the universe, physics provides a means of deeper appreciation. By its fundamental nature, physics is integral to many of the natural sciences and engineering, and essential to many forms of interdisciplinary study.

Our programs are anchored in the study of classical mechanics, electricity and magnetism, quantum mechanics, thermal and statistical physics, and astrophysics. We explore these topics using theoretical, experimental, and computational methods.

What skills does physics teach you?

Physics is a fundamental, experimental discipline that provides grounding in the scientific process as well as a number of highly valuable and transferable skills. In addition to the theoretical, experimental, and computational skills explicit in the curriculum, physics students also develop robust problem solving and critical reasoning abilities as well as effective collaboration. Communication is emphasized through technical writing, professional presentations, and various avenues for public engagement about science.

What major/minor should you choose?

The department offers two majors, in Physics and Astrophysics, a joint major in Physics, and a minor in Physics.

The Physics major has two concentration tracks to help students tailor their degree to their interests:

Physics

Computational Physics

These tracks are not meant to constrain students to a narrow set of options. Rather, they are meant to increase flexibility for students to take the courses they want.

Astrophysics

The astrophysics major focuses on applying physics to the study of the universe on the largest scales. The major aims to develop an understanding of a diverse array of extraterrestrial phenomena in the universe as well as the fundamental physics principles used to describe these phenomena. The major consists of 15 courses:

7 Physics courses: PHY 111, 112, 223,226,333,331; and either PHY 321 or 323.

4 Astrophysics courses: AST 121, 422; and two of AST 312, 322, 332.

4 Mathematics courses: MAT 109, 110, 111 and 229.

Physics

The Physics concentration track is the major with the most physics courses and gives students a well-rounded preparation. Students will learn about classical mechanics, electricity and magnetism, quantum mechanics, and thermal and statistical physics in classes and in the labs. This major is recommended for students who intend to pursue graduate study in experimental or theoretical physics. It consists of 14 courses:

10 Physics courses: PHY 111, 112, 223, 226, 331, 332, 333, 344, 422; and either PHY 321 or 323.

4 Mathematics courses: MAT 109, 110, 111, and 229.

Computational Physics

The Computational Physics concentration track emphasizes mathematical modeling and the complementary computational tools. This major will prepare students for a large range of post-graduate pursuits. It consists of 16 courses:

9 Physics courses: PHY 111, 112, 223,226,331,333,422, either PHY 321 or 323, and either PHY 332 or 344.

5 Mathematics courses: MAT 109, 110, 111, 229, and 338 (or an appropriate substitute).

2 Computer Science courses: CPS 111, 112.

Joint Physics major

A joint major that includes Physics is intended for students that are interested in bringing physics-related content and skills to a different area of study. Students have successfully coupled physics with other topics in the humanities, social sciences, and natural sciences. A joint major that includes Physics must include the following courses:

3 Physics courses: PHY 111, PHY 112, PHY 223.

3 Mathematics courses: MAT 109, MAT 110, MAT 111.

1 of the following pairs of courses: MAT 229 and PHY 226, MAT 229 and PHY 321, MAT 229 and PHY 323, or PHY 321 and PHY 323.

Minor in Physics

A minor in Physics is intended for students who already have some Mathematics (and maybe Physics) courses required in their major and want to go deeper. It consists of six courses in the department:

PHY 111, 112, 223 or an approved substitute; 226; 333; and one additional Physics course above the 100-level.

It should be noted that while there are no Mathematics courses in the minor, a number of them are still required for the individual courses. Because of this, the Physics minor is designed for students who have already completed several math courses in the course of a major in another natural science discipline, mathematics, or computer science. However, a student who completes the required courses is eligible for a minor in physics regardless of their major.

Dual-degree program

F&M participates in dual-degree programs, in which students receive a B.A. from the College and a B.S. in engineering from the partner institution, with Case Western Reserve, Columbia University, Rensselaer Polytechnic Institute, and Washington University. Degrees in Physics or Astrophysics provide excellent preparation for many different engineering specialties. Students interested in any of these programs are urged to discuss them with the department chair and the Engineering Professions Adviser in the Office of Student & Post-Graduate Development early in the planning of their academic programs.

How to get started?

Students considering a major in physics or astrophysics would normally take Physics 111 and Mathematics 109 or 110 in their first semester, and Physics 112, Astronomy 121 (for prospective Astrophysics majors) and Mathematics 110 or 111 in their second semester. However, students have successfully completed these majors following other paths.

STUDY ABROAD

Majors and minors in the Department of Physics and Astronomy have studied abroad in the following programs in recent years: Institute for Study Abroad, Butler University programs in Scotland, Australia, England, Ireland and New Zealand; TASSEP (Trans-Atlantic Science Student Exchange Program). See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirementt; (WP) World Perspectives requirement.

PHYSICS

101. General Physics 1. (N)
First semester of a year-long algebra-based sequence. Physics 101 introduces Newtonian mechanics along with additional topics such as thermodynamics, fluid mechanics, and waves. Laboratory work involves scientific reasoning, mathematical models, and uncertainty analysis. Knowledge of algebra and trigonometry expected. Students cannot earn credit for both PHY 101 and PHY 111. Offered every semester.
Gagnon, Schmidt

102. General Physics 2. (N)
Second semester of a year-long algebra-based sequence. Physics 102 introduces electricity, magnetism, and optics along with additional topics such as waves and nuclear and atomic physics. Laboratory work involves scientific reasoning, mathematical models, and uncertainty analysis. Knowledge of algebra and trigonometry expected. Students cannot earn credit for both PHY 102 and PHY 112. Prerequisite: PHY 101. Offered every Spring. *Krebs*

111. Introduction to Mechanics. (N)
An introduction to fundamental physical principles governing mechanics, including trajectories, forces, Newton's Laws, mechanical energy and momentum, circular motion, thermodynamics, oscillations, and waves. Laboratory work involves scientific reasoning, mathematical models, and uncertainty analysis. These topics will be covered in more depth and with more mathematical sophistication than in PHY101. This course is designed for physical science students and forms the foundation for subsequent courses in the physics and astrophysics majors. Students cannot earn credit for both PHY 111 and PHY 101. Corequisite: MAT 109. Offered every semester. *Adkins,Krebs*

112. Introduction to Electricity and Magnetism. (N)
An introduction to fundamental physical principles governing electricity and magnetism, including Coulomb's Law, electric fields and potentials, magnetic fields, circuits, and optics. Laboratory work involves scientific reasoning, mathematical models, and uncertainty analysis. These topics will be covered in more depth and with more mathematical sophistication than in PHY102. This course is designed for physical science students and forms the foundation for subsequent courses in the physics and astrophysics majors. Students cannot earn credit for both PHY 112 and PHY 102. Prerequisite: PHY101 or PHY111; Corequisite: MAT 110. Offered every semester. *Crawford*

223. Modern Physics. (N)
Topics include special relativity, vibrations and waves, kinetic theory, basic quantum mechanics, quantum statistics and selections from atomic, molecular, solid state, nuclear and high-energy physics, or astrophysics. The course includes emphasis on development of laboratory, data analysis and mathematical skills. Prerequisite: PHY 112 or permission of instructor. Offered every Fall. *Krebs*

226. Classical Mechanics.
Newton's laws applied to particles: rectilinear motion; simple, damped and driven oscillations; gravitation and central forces; Lagrange's equations and the Hamiltonian; non-inertial frames of reference; and dynamics of systems of particles. Laboratory work with computational modeling. Prerequisites: PHY 111. Corequisite: MAT 229. Offered every Spring. *Stubbins, Trainor*

321. Experimental Physics: Electronics. (N)
Basic electronic concepts, devices and circuits, d.c. and a.c. circuit theory with emphasis on equivalent circuit models. Design and analysis of power

supplies, amplifiers and oscillators. Laboratory work with instruments and circuits. Prerequisite: PHY 223 and MAT 111 or permission of the instructor. Replaces PHY 222. Offered Fall 2022. *Gagnon*

323. Experimental Physics: Optics. (N)
Introduction to geometrical and physical optics: waves, optical components, interference, diffraction, polarization, and lasers. Laboratory work supports classroom content, introduces modern optical equipment and measurement techniques, and explores current applications of optics. Prerequisite: PHY 223 and MAT 111 or permission of the instructor. Replaces PHY 224. *Lytle*

331. Mathematical Methods of Physics.
Mathematical techniques important in analyzing physical systems; topics include Fourier series; series solutions of differential equations with applications such as Schrödinger's equation and electrostatic potential theory; partial differential equations, with multi-dimensional applications to electrostatic potentials, the heat flow and wave equations, Poisson's equation and electromagnetic radiation. Prerequisite: PHY 226 or permission of the instructor. Offered every Fall. *Adkins*

332. Statistical and Thermal Physics.
Physical concepts and methods used in describing the behavior of systems consisting of large numbers of particles. Statistical mechanics and thermodynamics discussed from a unified point of view. Connection between the microscopic content of the theory and the laws of thermodynamics developed. Prerequisites: MAT 111 and PHY 226 or permission of the instructor. Replaces PHY 432. *Stubbins*

333. Electric and Magnetic Fields.
Topics include Coulomb force, electrostatic field and potential, Gauss's Law, dielectrics, Ampere's Law, Faraday's Law, magnetic properties of matter, Maxwell's equations and electromagnetic radiation. Corequisite: PHY 331 or permission of the instructor. Offered every Fall. *Schmidt*

344. Quantum Mechanics.
Basic postulates of quantum mechanics; wave equation in one and three dimensions; non-degenerate, degenerate and time-dependent perturbation theory; the hydrogen atom. Prerequisite: PHY 331 or 333 or permission of the instructor. Offered every Spring. *Lytle*

422. Advanced Methods of Physics. (N)
Designed to familiarize students with equipment and procedures used in a research laboratory. Experiments will illustrate principles involved in atomic, molecular and solid-state physics. Computer interfacing of apparatus using LabVIEW or similar software will be introduced. Prerequisites: PHY 321 or 323; and PHY 333. Corequisite: PHY 344 or permission of the instructor. Offered every Spring. *Lytle*

390, 490. Independent Study.
Independent study directed by the Physics staff. Permission of the department chair is required.

ASTRONOMY

100. Survey of Astronomy. (N)
A survey of important areas and concepts of astronomy. Topics may include development of astronomy from ancient to modern times, including studies of the night sky; light and the electromagnetic spectrum; our solar system, including the laws governing the motion of the planets; evolution and properties of stars; black holes and neutron stars; structure, origin and evolution of galaxies; and the history and present properties of the universe. Weekly laboratory meetings at the Observing Deck, Planetarium or Computer Classroom. *Staff*

101. Exploring Ideas in Astronomy. (NSP)
An exploration of topics in astronomy with a view toward understanding the big ideas. After establishing a solid background in the quantitative scientific and physical principles that underlie these topics, the course discusses topics centered around big questions (for example, how do astronomers study the sky? how do we study things we can't see? how will the universe end?). The course includes several field experiences. Math is regularly used for quantitative analysis throughout the course at the level of algebra and trigonometry/geometry (no calculus). Students cannot earn credit for both AST 101 and AST 100. *Trainor*

121. Introduction to Astrophysics. (N)
A quantitative introduction and exploration of some of the main ideas in modern astrophysics with an emphasis on the relationship of contemporary physics to astronomy. Topics may include astronomical instrumentation, radiation laws and spectra, physical characteristics of the sun and other stars, stellar formation and evolution, the solar system, compact objects, extragalactic astronomy and galaxies, and cosmology. Weekly laboratory meetings at the Observatory Deck, Planetarium or Computer Classroom. Corequisite: MAT109. Offered every Spring. *Schmidt*

312. Solar System Astrophysics.
A study of the characteristics of the solar system from a physical perspective. Topics include the physics of planetary atmospheres and interiors, dynamics of solar system bodies, magnetic fields, and the solar wind. Prerequisite: AST 121 or 100. Corequisite: PHY226. *Crawford*

322. Stellar Astrophysics.
A study of the physics of stars (including the Sun), star formation, the interstellar medium, structure and evolution of stars, properties of normal stars, stellar interiors, and stellar kinematics; exotic end-states of stars. Prerequisite: AST 121 or 100. Corequisite: PHY226. *Staff*

332. Galaxies and Cosmology.
A study of the physical properties of galaxies and their nuclei, large-scale structure in the universe; and cosmology. Topics include galactic structure and properties of normal galaxies; galaxy formation; the Hubble flow and cosmic distance scales, active galaxies and quasars; galaxy clusters and large-scale structure of the universe; cosmic background radiation, and inflationary "big bang" cosmology. Prerequisite: AST 121 or 100. Corequisite: PHY226. *Trainor*

386. Changing Concepts of the Universe. (NSP)
Historical examination of primitive and early cosmologies to present-day theories of the organization, extent and nature of the universe. Early Greek astronomy to present-day "big bang" theory. Use of simple astronomical instruments to reproduce observations of early astronomers. Not a laboratory course. *Same as STS 386*. *K.A. Miller*

387. Archaeoastronomy. (NSP)
Fundamental astronomy of ancient cultures: Stonehenge and other stone rings in England and Europe; circles and temples in the Americas, Asia and Africa; time-keeping and calendars; prediction of seasons and eclipses. Methods of analysis: motions of celestial bodies; use of planetarium, celestial globes and grids; surveying of sites. Not a laboratory course. *Same as STS 387*. *E. Praton*

422. Advanced Methods of Astrophysics. (N)
Investigations into the experimental and observational techniques used in modern astrophysics. Overviews of instrumentation and detection methods; numerical and observational principles used; data reduction and analysis; error analysis and statistical confidence. Coursework includes classroom and experimental lab work, observing projects, and independent projects and presentations. Open to Seniors. Offered every Spring.

390, 490. Independent Study.
Independent study directed by the Astronomy staff. Permission of the department chair is required.

PSYCHOLOGY

Professor Meredith Bashaw, Chair
Professor Ryan Lacy Associate Chair

Meredith J. Bashaw	*Professor of Psychology*
Michael L. Penn	*Professor of Psychology*
Lauren H. Howard	*Associate Professor of Psychology*
Megan L. Knowles	*Associate Professor of Psychology*
Ryan T. Lacy	*Associate Professor of Psychology*
Timothy C. Roth II	*Associate Professor of Psychology*
Joshua D. Rottman	*Associate Professor of Psychology*
Carlota Batres	*Assistant Professor of Psychology*
Elena Cuffari	*Assistant Professor of Psychology*
Christina L. Abbott	*Teaching Professor of Psychology*
Nicole Baran	*Visiting Assistant Professor of Psychology*
Catalina Iricinschi	*Visiting Assistant Professor of Psychology*
Lucia Parry	*Visiting Assistant Professor of Psychology*

Psychologists study mind and behavior in both human and non-human animals. They test hypotheses and theories using systematic observations of behavior in experimental, field, computer modeling and self-report settings.

We believe that the best way to communicate this empirical approach is by participating in it, so students learn and apply psychological methods in our courses. Our curriculum addresses current psychological theories that apply to a wide range of phenomena, but it also shapes students to employ various approaches to the empirical analysis of such theories. During this process, students develop analytical, research, quantitative and communication skills. Our empirical orientation also leads students to participate in collaborative and independent research experiences under the mentorship of our faculty.

Questions about behavior can be addressed at multiple levels of complexity (e.g., neural, cognitive and contextual) and from multiple perspectives (e.g., learning, perceptual, developmental and social). Our curriculum embodies these multiple conceptual approaches, as reflected in diverse course offerings as well as our participation in the Biological Foundations of Behavior and Scientific and Philosophical Studies of Mind interdisciplinary programs.

While Psychology students have the flexibility to create countless paths through the major, most students complete their major coursework in a common sequence that provides the scaffolding for deeper engagement with and application of psychological science. Majors are first introduced to a broad array of psychological phenomena, theories, and methodological techniques in Introductory Psychology (PSY 100). Then, students are prepared to explore different areas of psychology and related fields by taking five courses at the 200- or 300-level. At the same time, students develop their research skills by completing Research Design and Statistics (PSY 300) and further refine their research toolkit by taking a 300-level lab course in an area of interest. Finally, majors complete a pair of culminating experiences in their senior year. They collaborate on an empirical research project with their classmates in a 400-level Collaborative Research course and they demonstrate independence, integration, and depth of understanding in a 400-level Psychology seminar, senior independent research project (PSY 490), or a 400-level Psychology community-based learning (CBL) course.

A major in Psychology for the class of 2023 consists of 10 courses:

PSY 100 and 300 (formerly 230);

Four Area Studies courses; at least one course from each of the areas below. (It may be possible to substitute a related, non-introductory course with permission.) A single course may not be counted for more than one Area.

Perception and Physiological Psychology
PSY 240. Neuroscience.
PSY 301. Sensation and Perception.
PSY 351 (formerly 302). Biopsychology with Lab.
PSY 357 (formerly 303). Hormones and Behavior with Lab.

Development and Cognition
PSY 202 (formerly 304). Developmental Psychology.
PSY 205 (formerly 317). Health Psychology.
PSY 207 (formerly 340). Psycholinguistics.
PSY 305. Cognitive Psychology.
PSY 311. Origins of Moral Thought.

Personality, Social and Psychopathology
PSY 201 (formerly 315). Cross-Cultural Psychology.
PSY 204 (formerly 319). Emotion.
PSY 205 (formerly 317). Health Psychology.
PSY 206 (formerly 307). Personality Psychology.
PSY 208 (formerly 308). Psychopathology.
PSY 309. Social Psychology.

Evolution and Adaptation
PSY 203 (formerly 312). Embodied Cognition.
PSY 204 (formerly 319). Emotion.
PSY 320 (formerly 250). Animal Behavior with Lab.
PSY 310. Conditioning and Learning.
PSY 311. Origins of Moral Thought.
PSY 350. Primate Behavior.
PSY 464 (formerly 306). Evolution of Mind and Intelligence.

One elective course in Psychology; the elective course must be above the 100 level. (It may be possible to substitute a related, non-introductory course with permission.)

Three 400-level courses. At least two of the three courses must be Empirical Research (ER) courses. A student approved to enroll in PSY 490 may count one semester of Independent Research towards this requirement.

The writing requirement in the Psychology major is met by completion of the normal courses required to complete the major.

Students may not apply any more than three courses from another major to their Psychology major.

A major in Psychology for the Class of 2024 and later consists of 10 courses:

Introducing psychology as a natural science

Take Introductory Psychology (PSY 100)

Exploring psychology and related fields

Choose five 200-, 300-, or 400-level PSY courses

Must include one biological perspective (BP) course
- PSY 351. Biopsychology with Lab.
- PSY 357. Hormones and Behavior with Lab.

May include one directed research course (PSY 290 or PSY 390)

May include one relevant cognate course in another department
- AMS/HIS/WGS 310. Masculinities.
- AMS/BOS/WGS 385. Gender at Work.
- BIO 240. Neuroscience.
- BIO 336. Evolution.
- BIO 337. Behavioral Ecology.
- BIO 343. Functional Human Neuroanatomy.
- BIO/PBH 354. Epidemiology.
- BOS 341. Marketing.
- BOS 345. Consumer Psychology.
- CPS 360. Introduction to Machine Learning.
- CPS 367. Artificial Intelligence.
- CPS 371. Human-Robot Interaction.
- CPS 375. Human-Computer Interaction.
- ECO 350. Game Theory.
- ECO 354. Behavioral Economics.
- ENG 165. Violence, Truth, and Story.
- ENG 210. Modernism and Modernity.
- ENG/LIT 315. Introduction to Literary Theory.
- ENG 470. Henry James: Story of the Mind.
- ENE/STS 117. The Environment and Human Values.
- GOV 318. Media and Politics.
- GOV 425. Human Rights-Human Wrongs.
- GOV 450. Political Psychology.
- HIS/WGS 356. European Sexualities.
- INT 261. Experiential Elementary Science Teaching.
- INT 274. Entrepreneurial Thinking.
- ITA/WGS 367. Women and Gender in Italian Literature.
- LIN 120. Sociolinguistics.
- MAT 215. Introduction to Statistical Modeling.
- MUS/IST 228. Middle Eastern Music and Culture.
- PBH 251. Introduction to Public Health.
- PHI/STS 223. Biomedical Ethics.
- PHI 236. Knowledge and Reality.
- PHI 250. Philosophy of Mind.
- PHI 335. Belief and Knowledge.
- PHI 339. Philosophy of Language.
- PHI 351. Mind-Body Problem.
- PHI 352. Philosophy of Emotions.
- PHI 353. Phenomenology and Cognitive Science.
- PHI 360. Concept of a Person.
- PHI 362. Love and Friendship.
- RST 167. Spiritual America.
- RST 373. Buddhist Meditative Traditions.
- RST 339. Religion and the Brain.
- SOC 210. Social Psychology.
- SOC 330. Sociology of Medicine.
- SOC/WGS 345. Sociology of Sexuality.
- SOC/WGS 350. Sociology of Gender.
- SOC 355. The Sociology of Culture.
- SOC 360. Race and Ethnic Relations.
- SOC/WGS 364. Sociology of the Family.
- SOC/AFS/PBH 366. Race, Ethnicity and Health.,
- SOC 440. Sociology of Food.
- SOC/AFS/WGS 460. Race, Gender and Class on Campus.
- TND 320. Kinesiology for Dance.
- WGS 210. Gender, Sexuality and Power.

Developing research skills sequence

Take Research Design and Statistics (PSY 300)

Choose one 300-level Laboratory course
- PSY 320. Animal Behavior with Lab.
- PSY 351. Biopsychology with Lab.
- PSY 357. Hormones and Behavior with Lab.

Culminating experiences

Choose one 400-level Collaborative Research course
- PSY 460. Advanced Quantitative Methods.
- PSY 480. Animal Behavior and Models.
- PSY 482. Human Behavior Through a Social or Evolutionary Lense.
- PSY 483. Human Cognition in Context.
- PSY 486. Human Physical and Mental Health.

Choose one 400-level Integration or Application course (CBL, seminar, or PSY 490)
- PSY 450. Cognitive Development.
- PSY 451. CBL: Applied Psychological Science.
- PSY 452. History and Philosophy of Psychology.
- PSY 453. Nature/Nurture.
- PSY 464. Evolution of Mind and Intelligence.
- PSY 490. Independent Research in Psychology.

The writing requirement in the Psychology major is met by completion of PSY 300 and the Culminating Experiences required to complete the major.

Students may not apply any more than three courses from another major to their Psychology major.

A joint major in Psychology consists of eight courses: PSY 100 and PSY 300 (formerly 230); any four psychology courses at the 200- or 300-level; and any two psychology courses at the 400-level.

The requirement for a minor is any six courses in Psychology. Majors in the Department of Psychology have studied abroad in the following programs in recent years: Danish Institute for Study Abroad (DIS) in Copenhagen and Stockholm; Institute For Study Abroad (IFSA) at Butler University programs in Argentina, Australia, New Zealand, and the United Kingdom; Boston University London Internship Program; IES Abroad programs in Austria, Italy, and Spain; Syracuse University Abroad programs in Spain; Psychology and Research in Madrid program through the University of Minnesota Learning Abroad Center; Budapest Semester in Cognitive Science. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (NSP) Natural Science in Perspective; (LS) Language Studies requirement; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement; (ER) Empirical Research requirement.

INTRODUCING PSYCHOLOGY

100. Introductory Psychology. (N)
An experimental and conceptual analysis of the processes of learning, thinking and perception and the biological bases of behavior. The relationships of these to behavioral development, social behavior and more complex phenomena of personality formation and abnormal behavior are undertaken. Required laboratory work involves investigation of the various processes in animals and humans. Offered every semester. Students cannot earn credit for both PSY 100 and PSY 101 unless permission is obtained from the department. *Staff*

101. Introduction to Psychological Science. (NSP)
A topics-based, non-lab, non-survey, question-and procedure-oriented discussion of important perspectives in contemporary psychological science. The course will examine origins, support for, and applications of a series of theoretical positions. In the process, students will learn to appreciate the empirical procedures through which psychologists formulate and evaluate hypotheses about behavior, using texts as well as primary literature that illustrates how these procedures occur in actual practice. Students cannot earn credit for both PSY 100 and PSY 101 unless permission is obtained from the department. *Staff*

EXPLORING PSYCHOLOGY - CONTENT COURSES NO PREREQUISITES

220. Neuroethics. (NSP)
This course will examine our changing social, ethical, and political perceptions of human behavior in relation to changes in our understanding of the brain and its function, particularly in terms of advances in science that have occurred over the past 50 years. We will discuss the implications of our ability to monitor and manipulate the brain for our understanding of what is moral, normal, and healthy. Topics covered will include disorders of consciousness, cognitive liberty, psychiatric diseases and their treatment, drugs and addiction, and the role of the brain in producing socially unacceptable or undesirable behaviors. Open to sophomores, juniors, and seniors. *Roth*

INTRODUCTORY-LEVEL PREREQUISITES

201. Cross-Cultural Psychology.
Cross-Cultural Psychology serves as an introduction to the relationships among cultural processes, human consciousness, human health and human development. Prerequisite: PSY 100 or SPM 100. Same as AFS 201. Previously PSY 315. *Penn*

202. Developmental Psychology.
An examination of the relative contributions of nature and nurture on children's behavioral, cognitive, and perceptual development from the prenatal period through adolescence. Topics include the development of language, concepts, intelligence, socialization, motor abilities, and emotional understanding, with discussion informed by current and classic primary reading. Research activities and analyses integrated into course work. Prerequisite: PSY100, SPM 100, or a prior philosophy course. Previously PSY 304. *Howard, Parry*

203. Embodied Cognition. (NSP)
Embodied Cognition studies mind as the dynamic, adaptive, meaning-creating activity of bodies in environments. Surveying the foundations of this framework (e.g. ecological psychology, robotics, phenomenology, cognitive linguistics, and social interaction), we will explore the entangled evolutionary histories of agents, environments, and their transactions (including language). Through activities and discussions we will investigate how bodies being bodies together give rise to value, reasoning, action, and experience. Prerequisite: PSY100, SPM100, or a prior philosophy course. Previously PSY 312. *Cuffari*

204. Emotion.
This course will serve as an introduction to theoretical and empirical approaches to the study of human emotion. Some questions this course will address include: What are emotions? What are the functions of emotions? How do our emotions affect our thoughts and behaviors? How do we regulate our emotions? We will also consider how the answers to these basic questions can be used to understand psychopathology, well-being, and happiness in both children and adults. Prerequisite: PSY 100 or SPM 100. Previously PSY 319. *Staff*

205. Health Psychology.
This course explores the complex factors that affect human health, specifically examining how health and health-related behavior is influenced by the interrelationship of multiple environmental and individual factors ranging from individual personality to health policy. This course also examines the fundamental principles and theories of Health Psychology and how theoretical and empirical findings are applied to improve the health of individuals and groups. Prerequisite: PSY 100 or SPM 100 or BIO 101/110. Same as PBH 205. Previously PSY 317. *Abbott*

206. Personality Psychology.
This course provides an evaluative and comparative overview of major models of personality selected to illustrate psychodynamic, trait, cognitive, humanistic, physiological, and learning approaches. The course will emphasize the testability of the models and their connection with current research. Research activities and analyses integrated into course work. Prerequisite: PSY 100 or SPM 100. Previously PSY 307. *Staff*

207. Psycholinguistics.
This course explores language in the mind and brain, including: How do children learn their first language(s) and why is it such a different experience for an adult to learn a language? What are language disorders? Is spoken language processed differently from written language? What about sign languages? Class will include discussions, presentations, and hands-on analysis of language data. Prerequisite: LIN 101 or PSY 100. Same as LIN 207. Previously PSY 340. *Cox*

208. Psychopathology.
This course will serve as an introduction to descriptive and theoretical approaches to the study of psychopathology. In addition to the study of disease-related processes, special emphasis will be placed upon developing an understanding of those biological, psychological and social conditions that are essential for healthy psychosocial functioning across the life span. Prerequisite: PSY 100 or SPM 100. Previously PSY 308. *Penn*

STATISTICS COREQUISITE

305. Cognitive Psychology.
In this course we will ask how some familiar human behaviors—seeing, classifying, remembering, speaking, reasoning—are possible. We will learn how cognitive scientists go about answering these questions and what some of the classic answers are. The idea is both to introduce some key findings in cognitive psychology and to develop the skills to understand and critically evaluate cognitive psychology research. In addition to lectures, the course will include hands-on experiments and demonstrations; student presentations of individual journal articles; and debates about the broader implications of some cognitive psychology research. Prerequisite: PSY 100 or SPM 100 or permission. Corequisite: PSY 300/230 or BIO 210. *Howard, Iricinschi*

309. Social Psychology.
This course involves the student in exploration of some of the basic topics in experimental approaches to social psychology, such as cognitive and motivational perspectives on social phenomena, the role of affect and emotion in social action and current uses of the concept of self. Issues explored in this context include self-affirmation processes, regulation of

social action and the relationship between affect, cognition and action. Research activities and analyses integrated into coursework. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. *Knowles*

310. Conditioning and Learning.
An introduction to the process by which human and animal behavior changes as a function of experience. Examines basic mechanisms for learning (including habituation, sensitization and classical and operant conditioning) and explores the scientific and practical application of these mechanisms to explain and predict behavior. Discusses the extent to which learning mechanisms are consistent across species and how the physiology, natural environment and social systems of individual species interact with basic learning processes to produce different behavioral outcomes. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. Same as BFB 310. *Lacy*

311. Origins of Moral Thought.
Moral values define us, unite us, and give meaning to our lives. How have we come to hold our particular moral convictions? We will examine this question on three different timescales: millennia (human evolution), centuries (cultural dynamics), and years (child development). Students will evaluate and synthesize insights from psychology, philosophy, biology, anthropology, economics, and history in order to understand the manifold origins of moral beliefs and behaviors, thus challenging existing values and cultivating improved abilities to create a better future. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. *Rottman*

DEVELOPING RESEARCH SKILLS

300. Design and Statistics.
Descriptive and inferential statistics. Research design as reflected in statistical methods. Analysis of variance designs for independent groups and for repeated measurements. Statistical power and comparison techniques. Offered every semester. Prerequisite: PSY 100 or BIO 101/110. Previously PSY 230. *Staff*

320. Animal Behavior with Lab. (N, LAB)
An integrative approach to animal behavior from the perspectives of ethology, behavioral ecology, and comparative psychology. The structure, function, development, and evolution of behavioral adaptations including orientation, foraging and predation, communication, social organization, and reproductive strategies. Observational and experimental research required. Outside class time to work on independent research project. Prerequisites: BIO 101/110 and permission of instructor. Corequisite: either BIO 210 or PSY 300/230, or permission of the instructor. Same as BFB/BIO 320. Previously PSY 250. *Baran, Roth*

351. Biopsychology with Lab. (N, BP, LAB)
Behavioral and mental processes as viewed from a biological perspective with particular emphasis upon the role of neurochemical and endocrine factors in central nervous system function. Topics covered will include reproduction and gender, chemical senses and ingestion, emotion, learning, sleep and psychopathology. A neuropharmacological approach to the study of the nervous system will be emphasized. Prerequisite: PSY 100 or SPM 100 or BIO 101/110; and PSY 300/230 or BIO 210. Same as BFB351. Previously PSY302. *Roth*

355. Face Perception with Lab. (N, LAB)
An introduction to the study of face perception. This course focuses on the processes which are involved in the perception and recognition of human faces. Specific topics covered include how facial traits influence judgments and the variability in face processing abilities. Prerequisite: PSY 300/230. *Batres*

357. Hormones and Behavior with Lab. (N, BP, LAB)
Like many other animals, humans must successfully navigate stressful situations, sex, and other social interactions to survive and reproduce. How do hormones enable, regulate, or modify behavior in these situations? How do behavior and the environment in turn affect hormone function? Do these effects differ across species? We'll develop an understanding of the endocrine system's organization and activation effects by examining, evaluating, and conducting research on humans and other animals. Prerequisites: PSY 100 or BIO 101/110; and PSY 300/230 or BIO 210 or SOC 302. Same as BIO 357 and WGS 357. Previously PSY 303. *Bashaw*

400-LEVEL COURSES

450. Cognitive Development. (IA)
In a matter of months, a zygote goes from a collection of cells to a thinking, feeling, learning baby…who quickly goes on to be a walking, talking, problem-solving toddler…who soon after is a reading, writing, socially-aware child. It's breathtaking! This advanced, discussion-focused seminar explores the foundations of cognitive processes and developmental mechanisms that underpin our fantastic human cognitive growth. As we survey major topics in cognitive development, our focus will be primarily on birth through early childhood, asking the question: How do infants and children make sense of the myriad people, ideas, and objects around them? Prerequisite: PSY 202/304 or PSY 305 or PSY 311. *Staff*

451. CBL: Applied Psychological Science. (IA)
In this course, you will learn how to apply findings from basic psychological research to solve real-world problems. Students will work in partnership with local community groups to select a real-world problem of interest to address and complete a project. Final projects will be presented to a panel of researchers and community members. The course is collaborative in nature; you will work in groups to design and conduct your research and much of your grade in this course will be group-based. This course is for senior Psychology majors. *Abbott, Penn*

452. History and Philosophy of Psychology. (IA)
The historical origins of contemporary psychology in European philosophy, physiology, and biology, and subsequent development of the schools of structuralism, functionalism, Gestalt, behaviorism, and psychoanalysis. Emphasis on identifying the goals, implicit assumptions, and potential contributions of scientific psychology. Prerequisites: Senior psychology major status or permission of instructor. *Same as STS 452*. *Cuffari*

453. Nature/Nurture. (NSP, IA)
One of the most enduring disputes in the field of psychology concerns the degree to which psychological traits are learned or innate. Are genes or socialization responsible for heightened rates of aggression in men? How do biological and environmental factors interact to produce language? Is culture an evolved adaptation? Does it make any sense at all to partition the causes of thinking and behavior into "nature" and "nurture" – or is this a wholly false dichotomy? Throughout this course, we will draw upon cutting-edge research to evaluate a range of theoretical perspectives on the interplay of nature and nurture. We will also discuss the myriad sociopolitical ramifications of this fundamental debate. Prerequisites: PSY 300/230 and senior status; or permission. *Rottman*

460. Collaborative Research: Advanced Quantitative Methods. (N, CR)
An examination of complex univariate and multivariate statistical techniques as applied in the context of psychological research. The course will focus on techniques including complex analysis of variance, multivariate regression and correlation, factor analysis, and power and effect size. We will examine published research and conduct research projects to explore the relationship between hypotheses, experimental designs and these statistical techniques. Prerequisites: PSY 300/230 or BIO 210 and one 300-level PSY course. *Bashaw*

464. Evolution of Mind and Intelligence. (IA)
What is intelligent behavior, what is it for, and how did it evolve? We will attempt to answer these questions and understand the nature and development of Mind from a comparative perspective. We will do so by investigating learning, perception, memory, thinking, and language in animals and humans. Research activities and analyses integrated into course work. Prerequisites: BIO 210 or PSY 300/230; and BIO 336, BIO 337, PSY 203, PSY 311, or PSY 320. Previously PSY306. *Roth*

480. Collaborative Research: Animal Behavior and Models. (N, CR)
Students will work in teams to generate a research question, design a study, earn institutional ethics approval, collect and analyze data, and disseminate their findings on questions focused on non-human animals. Projects may

aim to better understand the animals themselves or use animals as models for human behavior. Research areas within this collaborative course may include any aspect of animal behavior in the field or in the laboratory. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230 or BIO 210; and PSY 203/312, PSY 310, PSY 320/250, PSY 351/302, PSY 357/303, or PSY 464/306; or permission. *Same as BFB/SPM 480*.

Bashaw, Lacy, Roth

482. Collaborative Research: Human Behavior Through a Social or Evolutionary Lens. (N, CR)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include experimental social psychology and/or evolutionary psychology. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 204/319, PSY 206/307, or PSY 309; or permission. *Batres, Knowles, Parry*

483. Collaborative Research: Human Cognition in Context. (N, CR)
Students will conduct experimental research to shed new light on the manifold manifestations of human cognition. This will involve an in-depth consideration of empirical and theoretical issues in cognitive science and cognitive psychology, including embodied and enactive approaches. Research topics will be chosen based on student interest. Techniques for designing, conducting, analyzing, and presenting empirical research will be discussed, practiced, and implemented. Prerequisites: PSY 300/230; and PSY 201/315, PSY 202/304, PSY 203/312, PSY 305, or PSY 311; or permission. *Cuffari, Howard, Iricinschi, Rottman*

486. Collaborative Research: Human Physical and Mental Health. (N, CR)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include psychopathology, health psychology, public health, and/or community psychology. Research topics will reflect student interest and the expertise of the course instructor. Projects use a variety of methods - including both quantitative and qualitative approaches. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 205/317, PSY 208/308, or PSY 357/303; or permission.

Abbott, Penn

PSY 490. Independent Research in Psychology (IA).
Design, propose, conduct, and present a psychological research project guided by a faculty mentor familiar with your area of investigation. Students are responsible for all aspects of the project from protocol development to written and oral interpretation of the results. Typically reserved for seniors with cumulative GPA above 3.0 and major GPA above 3.2 who have successfully completed a relevant area studies course, though students may petition the department to enroll if they don't meet these conditions. Students may elect to have a 490 project considered for departmental honors. Interested students should contact possible faculty mentors the semester before they plan to enroll. Prerequisite: Permission of faculty mentor and chairperson.

ELECTIVES

270-279, 370–379, 470-479. Special Topics in Psychology.
An examination of a single problem area of psychology receiving attention in the current literature. Permits in-depth analysis of a single, important psychological phenomenon. Admission by consent of instructor.

290, 390. Directed Research in Psychology.
Gain hands-on experience designing, conducting, and/or presenting a scholarly research project under the direction of a Psychology faculty member. Students normally produce a written final report. Typically reserved for sophomores, juniors, and seniors. Interested students should contact possible faculty supervisors the semester before they plan to enroll. Prerequisite: Permission of faculty supervisor and chairperson.

350. Primate Behavior.
This course explores the behavior of primates (including humans) in a comparative perspective. We will examine factors shaping behavioral variation within and between primate species, with emphasis on natural history and social behavior. Specific topics include methods for the study of primate behavior, history of primate behavior research, socioecology, foraging, predation, affiliation, aggression, mating, parenting, development, communication, cognition, and conservation. Emphasis will be placed on reading and critiquing primary literature, and on proper scientific writing. Prerequisite: PSY 320/250 or permission. *Same as BFB350*.

Staff

TOPICS COURSES EXPECTED TO BE OFFERED 2022–2023

Hormones and Behavior.
Storytelling and the Mind.
Drugs, Brain and Behavior.
Health Psychology with Lab.

PUBLIC HEALTH

Professor Clara S. Moore, Chair

MEMBERS OF THE PUBLIC HEALTH PROGRAM COMMITTEE

Kirk Miller	*B.F. Fackenthal, Jr. Professor of Biology*
Dean Hammer	*John W. Wetzel Professor of Classics and Professor of Government*
Clara S. Moore	*Professor of Biology*
Michael L. Penn	*Professor of Psychology*
James E. Strick (on leave Fall 2022)	*Professor of Science, Technology and Society*
Beckley Davis	*Associate Professor of Biology*
Caroline Faulkner	*Associate Professor of Sociology*
Biko Koenig	*Assistant Professor of Government*
Emily Marshall	*Assistant Professor of Sociology and Public Health*
Jennifer Meyer (on leave 2022-23)	*Assistant Professor of Government and Public Health*
Harriet Okatch (on leave 2022-23)	*Assistant Professor of Biology and Public Health*
Stephanie Stoehr	*Biosafety Officer and Teaching Professor of Biology*
Anne Stachura	*Coordinator, Spanish Community Based Learning and Community Outreach*

Additional faculty not on the program committee also contribute to this program.

Public Health is an interdisciplinary major that offers a core program of study, and a selection of concentration tracks in Biology, Government, or Sociology. Students in our courses study the health of communities and how it can be affected by community-based action. We study the burden of disease, the principles and history of public health and how to measure health, health in the context of human rights, how to measure and improve health systems, the influence of culture on health, and the organizational actors in local, national, and global public health. We draw on the science underlying health in human communities and examine the use of such knowledge in a political arena that is central to getting things done.

The mission of the Public Health major is to educate F&M students in public health from the perspective of the liberal arts, with particular attention to the analysis of public health

problems from multiple perspectives and with tools from multiple disciplines and with emphasis on theory and history. Public health is linked to the formulation and implementation of public policy, thus connecting natural and social sciences and government at its core. Public health incorporates an international perspective. We encourage and guide students to ask broad questions of meaning, to challenge assumptions and structures, to ponder ethical questions, to evaluate the effectiveness of solutions to problems, and to develop a deep moral intelligence surrounding public health.

The program offers a common set of seven core courses for all public health majors, and additional courses in one of three concentration tracks:

Public Health Core: PBH 251, PBH 354, BIO 110, BIO 210, GOV 200, PBH380,and Public Health Research: Topics capstone PBH47X.

Note: New Biology core sequence allows BIO101 or BIO102 in place of BIO110.

Biology Track: BIO 220; CHM 111; CHM 112; BIO 230; two approved BIO electives, with at least one being a lab course. Note: New Biology curriculum includes BIO 101, BIO 102 and BIO 200 to replace BIO 110, BIO 220 and BIO 230. Total courses required for the PH-Biology track remain the same.

Government Track: GOV 100 or GOV 120 or GOV 130, GOV 305, PBH 303 or GOV 373, STS 311 or PHI 223, one GOV course at the 300 or 400-level

Sociology Track: SOC 100; two from SOC 210, PBH/SOC 330, SOC 345, SOC 350, SOC 360, PBH/SOC 366; two approved SOC electives

Some new PBH cross-listed offerings may substitute for requirements in the tracks; consult with your adviser or the chair of the Public Health program.

Other statistics courses for the public health major to substitute for BIO 210 include MAT 216, BOS 250, or PSY 300 (formerly PSY 230).

Off-Campus Study

The off-campus study programs most frequently attended by students majoring in Public Health are:

School for International Training (SIT)

Danish Institute for Study Abroad/Institute for Study Abroad (DIS)

Institute for Study Abroad (IFSA)

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

PBH 205. Health Psychology.
This course explores the complex factors that affect human health, specifically examining how health and health-related behavior is influenced by the interrelationship of multiple environmental and individual factors ranging from individual personality to health policy. This course also examines the fundamental principles and theories of Health Psychology and how theoretical and empirical findings are applied to improve the health of individuals and groups. Prerequisite: PSY 100 or SPM 100 or BIO 101/110. Same as PSY 205. Previously PSY 317.
Abbott

PBH 251. Introduction to Public Health.
An introduction to public health, a field that endeavors to improve the health of the community through community-based action. The history of public health, how to measure community health, communicable diseases, chronic and lifestyle diseases, family health, nutrition and food safety, environmental health, the U.S. national health care system, underserved groups, public health law and ethics, and the future of public health. Prerequisite: BIO 110 or BIO 101 or BIO 102 or GOV 100 or permission. *Marshall, Tripp*

PBH 303. Problem-Solving Courts/Drug Court. (S)
This interdisciplinary community-based learning course, taught by a local Lancaster County Drug Court Judge, will introduce students to the real world of Problem Solving Courts, including Drug Courts and Mental Health Courts. This will include a hands-on/experiential examination of traditional courts, Drug Court models, and addiction issues. Students will be required to interact directly with Drug Court participants and members of the Lancaster County Court of Common Pleas Adult Drug Court Team. *Ashworth*

PBH 314. Reproductive Health and Justice in Latin American History. (S) (WP)
This course examines the history of reproductive health and the emergence of reproductive rights and justice movements in Latin America from the colonial period to the present. It explores how the practices of reproductive health, the intersections between sexuality and reproduction, and the professions of midwifery and obstetrics changed over time. The central themes of the course include birth control, maternal and infant mortality, sexually-transmitted diseases, family planning, and reproductive health policy, but with particular attention to Latin American gender systems and the region's cultural and ethnic diversity. *Same as HIS 314.* *Shelton*

PBH 330. Sociology of Medicine. (S)
An examination of the social and cultural factors which influence the occurrence, distribution and experience of illness, the organization of medical care in American society and its rapidly escalating costs, the technical and ethical performance of physicians and the ethical dilemmas associated with modern medicine. Prerequisite: SOC 100. S*ame as SOC/ STS 330.* *Marshall*

PBH 354. Epidemiology.
Epidemiology is the study of health and disease of populations. In this course, students will learn methods epidemiologists use to elucidate relationships between various types of exposures and positive or negative health outcomes; they will also explore methods to trace and predict disease patterns, including epidemics and pandemics. In this course, students will learn how to develop research questions, design ethical studies, conduct sampling for research, perform basic analyses, and minimize bias and other types of error. Prerequisites: PBH 251 or permission of instructor.
K. Miller

PBH 355. Genetic Susceptibility.
An exploration of inherited predisposition to human disease. This seminar course will introduce examples of disorders with differing frequency, penetrance, expressivity, and age of onset (Down syndrome, cancer). The progress in identification of genes, potential testing, and policy implications in the framework of medical advances and the healthcare system will be explored. Students will then investigate the current status of disorders linked to genetic susceptibility that are less defined or more complex than the selected examples. Prerequisite: BIO200 or BIO220. *Same as BIO355.* *Moore*

PBH 366. Race, Ethnicity, and Health. (S)
The course will utilize a sociological lens to examine the role of race and ethnicity in health outcomes, healthcare experiences, medical research, and clinical practice. Topics will include: socio-historical perspectives on notions of race in relation to biological difference; socio-historical understandings of the health consequences of racialized public health policies and politically sanctioned medical practices;contemporary racial and ethnic disparities in disease morbidity and mortality indicators; the operationalization of racial categories in epidemiological, public health, and biomedical research and practice; contemporary debates regarding race and genomics; and understandings of racial and ethnic dynamics in relation to health and medicine at the intersections of socioeconomic class, immigration status, gender, sexuality, and other markers of social identity. *Same as SOC/AFS 366*. *Rondini*

PBH 380. Health Policy. (S)
This course investigates domestic and global health policy issues. We will survey health care and health systems, focusing on health care spending, insurance, and health outcomes. Students will also examine ethical dilemmas and debates within health policy. We will ask what role health policy can play in addressing health disparities. Two questions infuse our deliberations: what can government do to shape the health of individuals and what should it do? Formerly PBH 410. *Same as GOV 380*. *Hoffmann*

PBH 47X. Public Health Research: Topics
In this interdisciplinary capstone seminar, students explore public health, policy and outcomes while learning how to conduct meaningful research on public health topics. Students will consider complex issues related to conducting research, then explore known and/or hypothesized relationships between behavioral, biological, sociopolitical, psychological, and environmental variables and outcomes. Prerequisites: PBH 354 or PBH 351 and one course from BIO 210, MAT 216, BOS 250, or PSY 230. *Tripp*

BIO 101. Evolution, Ecology, and Biodiversity. (N)
This course will examine life at individual/population/community/ecosystem levels through an investigation of evolution and ecology. Topics will include: micro- and macroevolution, the origin and diversification of life on earth, and ecological patterns and processes, including global ecology. No prerequisites. Offered every semester. May not be taken concurrently with BIO 102.
Fisher, A. Howard, Olson, Rice, Sipe

BIO 102. Cell and Molecular Biology. (N)
This course will examine life at cellular/subcellular levels through investigation of the molecular components of cells and regulation of genetic information. Core concepts will include the physical and chemical properties that govern the assembly and function of biological molecules, information flow from DNA to protein, and the mechanisms that regulate subcellular systems. Lecture topics will be integrated with a laboratory component that emphasizes core skills in molecular biology, including data collection, analysis, and interpretation. No prerequisites. Offered every semester. May not be taken concurrently with BIO 101.
Blair, Davis, Fields, Jenik, Roberts, Stoehr

BIO 200. Integrative Biology. (N)
This course will examine how structure and function in multicellular organisms is integrated. We will explore how a single cell develops into the complex, integrated systems of an organism in which groups of differentiated cells perform specific tasks. We will study specialized cell functions in the context of organismal physiology, and including signaling, metabolism, and transport. Using diverse examples from multiple kingdoms, we will explore how tissues, organs, and organisms have adaptations optimized for their environments, in order to utilize resources and to maintain homeostasis despite environmental stresses. Prerequisites: BIO 101 and BIO 102. Offered every semester.
Howard, Moore, Thompson

BIO 210. Biostatistics.
An introduction to descriptive and inferential statistics from the perspective of the life sciences. The emphasis will be on research design and on the use of graphical and computational methods in interpreting and communicating results. This course satisfies the statistics requirement in the Biology major curriculum. Prerequisite: BIO 110 or BIO 101.
Howard, Miller, Olson

GOV 100. American Government. (S)
Political power within the framework of American national government. Current governmental and political problems are explored.
Ciuk, Koenig, Medvic, Schousen, Wilson

GOV 120. Comparative Politics. (S)
Introduction to the theory and method of comparative politics. The course analyzes the government and politics of both developed and developing countries, encouraging students to apply the comparative method to draw conclusions about political processes and phenomena across nations and continents. *Dicklitch-Nelson, McNulty, Yen*

GOV 130. International Politics (S)
The theory and practice of international politics; the major actors in the international system and their various objectives; the interplay of power and principle in questions of: a) war and peace; b) trade and economics; c) international law and organizations; d) the environment.
Kasparek, Kibbe

GOV 200. Understanding Public Policy. (S)
Focus on government activity in a variety of public policy areas, the structural and political contexts of debates over alternative policy strategies and approaches to understanding public policy. Policy areas examined include the national budget and entitlements, science and technology and education. Prerequisite: GOV 100 or GOV 120 or PBH 251. *Same as PUB 200*. *Koenig, Tripp*

GOV 305. Public Policy Implementation. (S)
Focus on national government bureaucracy in the implementation of public policy, including exploration of the role of bureaucracies in contemporary political debate, organizational theory in the problems of governing and administrative politics and administrative due process. Prerequisite: GOV 100. *Koenig*

PHI 223. Biomedical Ethics. (H)
A survey of ethical issues related to developments in biology and medicine, including controversies at the beginning and end of life, autonomy and informed consent, and limits on medical research. Same as PHI 223.
Merli

SOC 100. Introduction to Sociology. (S)
Introduction to the basic concepts, theories, and methods used to study human social interaction and social structures. Readings and topics vary section to section, but typically address social stratification (primarily by race, class, and gender) and its impact on individual and social life, the sources of social order and social change, deviance and social control, and the interrelations between individuals and society. Prerequisite to all other departmental offerings. *Cannon, Faulkner, Marshall, Rondini, Singer*

SOC 210. Class, Status, and Power. (S)
In comparative survey of theories and research on inequality. Geographic patterns of inequality will be a main theme, in addition to racial, economic and political varieties. Covers both developed and developing countries. Past case studies have included Britain, South Africa, and Brazil. Prerequisite: SOC100. *Hodos*

SOC 345. Sociology of Sexuality. (S)
This course examines the idea that sex is not a natural act; instead, sex and human sexuality are socially constructed. We will examine how power — in a variety of forms — is at play in our social and cultural understandings and experiences of sex and sexuality. We will examine a variety of approaches to the study of sexuality as we consider sex, gender and sexual orientation, sexual relationships, the body, race/ethnicity, the commodification of sex, reproduction and contraception, and sexual violence. Prerequisite: SOC100. *Same as WGS 345*. *Faulkner*

SOC 350. Sociology of Gender. (S)
The course focuses on the constraints that the social construction of gender imposes on men, women, and LGBTQI/non-binary/gender nonconforming individuals, and helps students develop a critical analysis of gender as a social institution. It examines the intersections of gender with race, class, and sexuality, among other social locations, incorporating postcolonial/decolonial, queer, feminist, and science and technology theories. Prerequisite: SOC100 or WGS210. *Same as WGS350.*
Shokooh Valle

SOC 360. Race and Ethnic Relations. (S)
Study of intergroup relations with an emphasis on processes of racial/ethnic stratification (including cultural, structural, and attitudinal factors), assimilation, and cultural pluralism. Focus is on American society. Topics include the development and change of race/ethnic identities, inter-group attitudes, racial ideologies, immigration, education, and the intersection of race with social class and gender. Prerequisite: SOC100. *Same as AFS360.* *Rondini*

STS 311. History of Medicine. (S) (NSP)
The history of medicine with particular attention to American medicine. The relationship between medicine and society is studied in its historical context. We look in detail at some trends in modern medicine and the current debate over national health care policy in light of the history of medicine. *Same as HIS 311.* *Strick*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

PBH 179. Climate Crisis, Human Health & Justice.
PBH 272. Narratives of Disability.
PBH 278. History: Reproductive Health and Justice in Mexico.
PBH 370. COVID19, Population, & Health Inequities.
PBH 473. Public Health Research: Tobacco, Nicotine & E-Cigarettes.

PUBLIC POLICY

Professor Patrick Fleming, Chair

MEMBERS OF THE PUBLIC POLICY PROGRAM COMMITTEE

Stephen Medvic	*The Honorable and Mrs. John C. Kunkel Professor of Government*
Elizabeth De Santo	*Associate Professor of Environmental Studies*
Patrick M. Fleming	*Associate Professor of Economics and Public Policy*
Biko Koenig	*Assistant Professor of Government*
Jennifer Meyer	*Assistant Professor of Government and Public Health*
Berwood Yost	*Senior Adjunct Research Instructor of Government*

Additional faculty not on the program committee also contribute to this program.

The Public Policy program is designed to provide analytic skills and substantive knowledge to help students ask questions, determine the dimensions of societal problems and evaluate alternative solutions to resolve multifaceted policy issues. The study of Public Policy is available to students as a Joint Major, where the Public Policy Core forms one component and at least eight additional courses, determined by an existing academic department that offers its own major, form the balance of the program. Pre-approved Joint Major programs are currently available with Business, Organizations, and Society; Economics; Sociology; Government; Public Health; and Environmental Studies. Joint majors with Public Policy have also been approved with American Studies, Anthropology, History and Philosophy. Students wishing to combine Public Policy in a Joint Major with another existing major should first contact the Public Policy chairperson to determine the feasibility of the proposed Joint Major program and the appropriate course requirements. The usual rules for Joint Majors apply in the case of all Public Policy majors.

Students with a Joint Major in Public Policy have studied abroad or off-campus in the following programs in recent years: Institute for the International Education of Students (European Union), Freiburg, Germany and Barcelona, Spain; School for International Training (SIT) Study Abroad in Argentina, Brazil, India, Jordan, Spain, South Africa and Viet-Nam; Syracuse University, Strasbourg, France and Madrid, Spain; the National University of Ireland Galway; Danish Institute for Study Abroad, Copenhagen, Denmark; School for Field Studies, Bhutan; Washington Semester Program, American University, Washington, D.C.; and the University of Virginia, Charlottesville. The participating departments will work with Joint Major candidates to identify internships in the public and private sectors that will enhance their educational experiences through on-site learning opportunities. During the last few years, Public Policy students have successfully interned in local government, at departments of health in Philadelphia and Connecticut and at the U.S. Environmental Protection Agency in Washington, D.C. and Philadelphia, Pa.

PUBLIC POLICY CORE (PPC): EIGHT COURSES

ECO 100. Introduction to Economic Principles. (S)

ECO 103. Introduction to Economic Perspectives. (S)

GOV 100. American Government. (S)

PHI 122. Introduction to Moral Philosophy (H); PHI 223. Biomedical Ethics (H); PHI 227. Contemporary Political Philosophy (H) (V); or other approved PHI course.

GOV 200. Understanding Public Policy. (S)

Statistics/Methods Course in department of Joint Major or other department

Two additional electives to be chosen in consultation with the Director of the Public Policy Program.

The following courses are offered in support of the Public Policy curriculum:

200. Understanding Public Policy. (S)
Focus on government activity in a variety of public policy areas, the structural and political contexts of debates over alternative policy strategies and approaches to understanding public policy. Policy areas examined include the national budget and entitlements, science and technology and education. Prerequisite: GOV 100 or GOV 120 or PBH 251. *Same as GOV 200.* *Meyer*

227. Contemporary Political Philosophy. (H) (V)
This course surveys contemporary debates in political philosophy. Topics may include the foundations of liberalism and democracy, feminist and antiracist critiques of liberalism, the case for various kinds of equality, the challenge of global justice, and multiculturalism and minority group rights. *Same as PHI 227.* *Staff*

240. Environmental and Natural Resource Economics. (S)
A survey of environmental and natural resource issues in economic theory and policy. History of the environmental movement and environmental debates; theory of natural resource allocation, natural resource issues;

theory of environmental management—for example, externalities, public goods and common property. Topics covered will include pollution, resource depletion and global climate change. Prerequisite: ECO 100 and 103, or permission of the instructor. *Same as ECO/ENE 240*. *Fleming*

303. Problem-Solving Courts/Drug Court.
This interdisciplinary course, taught by a local Drug Court Judge will introduce students to the world of Problem Solving Courts, including Drug Courts and Mental Health Courts. This will include a hands-on/experiential examination of traditional courts, Drug Court models, and addiction issues. A major component of this course will involve community-based learning (CBL). Students will be required to interact directly with Drug Court participants and members of the Lancaster County Court of Common Pleas Adult Drug Court Team. Permission required. *Same as PBH 303*. *Ashworth*

305. Public Policy Implementation. (S)
Focus on national government bureaucracy in the implementation of public policy, including exploration of the role of bureaucracies in contemporary political debate, organizational theory in the problems of governing and administrative politics and administrative due process. Prerequisite: GOV 100. *Same as GOV 305*. *Staff*

313. Nuclear Power, Weapons and Waste Disposal. (NSP) (S)
Development of nuclear technology, beginning with the atomic bomb efforts of WW II. The course deals first with the technology itself, as well as with the ways in which it was embedded in and drove American and international politics, including the arms race and the Cold War. Includes postwar development of civilian nuclear power reactors, creation of the Atomic Energy Commission and the national debate over nuclear power and waste disposal methods. *Same as ENE/STS 313*. *Strick*

314. Global Environmental Politics.
The course provides an overview of current U.S. environmental laws, beginning with the National Environmental Policy Act (1969). Students will be introduced to the origin and implementation of major environmental laws that safeguard public health and protect the environment, including the Clean Air and Water Acts, Safe Drinking Water Act, and the 1980s legislative agenda developed to address hazardous waste, including the Superfund, Resource Conservation and Recovery Act, Toxic Substance Control Act, and the Community Right-to-Know Act. Students study original legislation and explore landmark court cases by way of which political and economic pressures have influenced subsequent amendments to the original intent of these laws. *Same as ENE 314 and GOV 374*.
Cann, De Santo

335. Business and the Natural Environment. (S)
Widespread concern for a cleaner environment and sustainable practices has put new demands on business. Exploration of philosophical, theoretical, strategic and policy issues facing organizations in relation to the natural environment. *Same as BOS/ENE 335*. *Kurland*

380. Health Policy. (S)
This course investigates domestic and global health policy issues. We will survey health care and health systems, focusing on health care spending, insurance, and health outcomes. Students will also examine ethical dilemmas and debates within health policy. We will ask what role health policy can play in addressing health disparities. Two questions infuse our deliberations: what can government do to shape the health of individuals and what should it do? *Same as PBH/GOV 380*. *Meyer,Tripp*

384. Urban Education. (S)
A community-based learning course analyzing issues facing urban schools from a sociological perspective, with particular attention to the role of race, class and gender at both the macro and micro levels. Other topics include teachers, schools as organizations, the social psychological perspective on learning, the politics of curricula and instruction, accountability and other contemporary reform movements. Students are expected to integrate and apply their knowledge through work in a local school. Prerequisite: SOC 100. *Same as SOC 384*. *McClelland*

TOPICS COURSES TO BE OFFERED IN 2022-2023

216. Environmental Policy. (De Santo)
223. Biomedical Ethics. (Merli)
332. Law, Ethics & Society. (Nesteruk)
372. Race and Inequality in the U.S. (Roncolato)
378. Border Law and Policy. (Perez)

RELIGIOUS STUDIES

Professor SherAli Tareen, Chair

David L. McMahan	*The Charles A. Dana Professor of Religious Studies*
Stephen A. Cooper	*Professor of Religious Studies*
John Modern	*Professor of Religious Studies*
SherAli Tareen	*Associate Professor of Religious Studies*
Rachel Feldman	*Assistant Professor of Religious Studies*

The Department of Religious Studies is committed to exploring and analyzing religion in a non-sectarian way. Our courses cover a variety of religious traditions embedded in myth, ritual, art, ethics, doctrine, philosophy, literature, asceticism and other social practices. First and foremost, the study of religion engages the human—the limits of human beings as they have multifariously expressed them: in their audacious explanations of the invisible, the immaterial and the transcendental; in the extremity of their practices and beliefs; in the ordinary ways in which they confront the overwhelming presence of violence, suffering and death; in the emotive terms they provide to explain the significance of the past and the future; and in the constant struggle to come to terms with themselves and others. These activities, whether explicitly identified as religious or not, represent the persistent grappling of human beings with what different cultures throughout world history have articulated as beyond and more than the human. This human engagement with the variously formulated more-than-human Other, this engagement manifesting itself variously in many arenas of cultures, is the object of the academic study of religion. As such, the field demands an interdisciplinary approach drawing on the methodologies native to the humanities and social sciences as well as on the theoretical approaches developed specifically in the study of religion.

A major in Religious Studies consists of 11 courses. Two of these are mandatory: Introduction to Religious Studies (RST 111); and "Why Religion Matters Today (RST 320), a senior-year capstone seminar. In each of five areas (American Religions, Asian Religions, Christianity, Judaism, Islam), students must take a 100- or 200-level course. Of the remaining four courses, at least three must be at the 300- or 400-level.

A joint major in Religious Studies consists of eight courses: RST 111, RST 320; one course (100 or 200 level) in Judaism; one course (100 or 200 level) in Christianity; one course (100 or 200 level) in Islam; one course (100 or 200 level) in American religions; one course (100 or 200 level) in Asian religions; and one course at the 300 level.

A minor in Religious Studies consists of six courses. Requirements: RST 111; any other three courses at the 100- or 200-level; one course at the 300-level; and the senior capstone seminar, RST 320.

The writing requirement in the Religious Studies major is met by completion of the normal courses required to complete the major.

Students interested in taking courses at Lancaster Theological Seminary can sometimes do so with the permission of the Religious Studies chair (consult the rules on "Exchange Opportunities" in the latter part of this Catalog for further details).

Majors in the Department of Religious Studies have studied abroad in the following programs in recent years: Tohoku Gakuin University (Japan); Israel University Consortium; School for International Training (India, Nepal, South Africa, Tibet); Fulbright Morocco; History of Christianity at Aberdeen University (Scotland); South India Term Abroad (Madhurai, India); IFAS Butler Cambridge, Pembroke College, Cambridge University (United Kingdom). See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives.

INTRODUCTORY COURSES

111. Introduction to Religious Studies. (H) (WP)
Asks the question: "What is religion?" and provides a variety of answers by looking both at representative religious documents from a wide array of traditions and at theories about religion in the West. *Feldman*

112. Judaism. (H) (NW)
This course introduces students to the study of Judaism as text and as a living evolving practice. Students will read primary scriptural sources as well as foundational works of Jewish philosophy and mysticism. The dynamic interaction between Jewish text and ritual expression will be examined as students encounter Jewish themes of exile, peoplehood, holiness, and tikkun olam (world-fixing) across historical time periods and in a variety of Jewish cultural contexts. Throughout the course, students will explore the tension between Jewish legal-philosophical traditions and mystical messianic movements to consider the ways in which Judaism responds to the larger existential question: What is the purpose of life?. *Same as JST 112*. *Feldman*

113. Christianity. (H)
Surveys a variety of topics in the history of Christianity. Topics include the origin of the religion, its persecution by Rome and the eventual conversion of the Roman Empire, the development of Trinitarian theology, the ascetic and monastic movement, scholasticism, the Crusades, mysticism and reform movements in the Latin church of the Middle Ages, the Protestant Reformation and the development of liberal and evangelical theologies in the 20th century. *Cooper*

114. Islam. (H) (NW)
This course is an introduction to the intellectual and political history of Islam in both pre-modern and contemporary times. Several major aspects of Islamic religious thought will be covered including the Qur'an and its interpretations, the persona and prophetic authority of Muhammed, law and theology, law and gender, Islamic mysticism, and contemporary Muslim reform movements. We will use a range of sources including primary religious texts (all in translation), anthropological works, novels, films etc. to examine the diversity and complexity of Muslim thought and practice, both past and present. While focusing on Islam, this course will also familiarize students with larger conceptual questions and problems in the academic study of religion. *Tareen*

122. Asian Religions. (H) (NW) (WP)
Historical and thematic survey of the major religious traditions of Asia, concentrating on the more influential traditions of India, China, Japan and Tibet. Covers select traditions of ancient and modern forms of Hinduism, Buddhism, Confucianism and Daoism. Focuses on doctrine, myth and ritual in particular cultural and historical contexts. *McMahan*

167. American Spiritualities. (H)
The language of spirit and/or spirituality is everywhere these days. Among a fast growing percentage of the United States population, "spiritual but not religious" now serves as a declaration of one's unique religious orientation. What is significant about spirit- and/or spirituality-talk pervading American culture? Is there something new going on here? Or can spirituality be traced back through American history, even when it was not called that? This course offers a series of case studies, spanning the 17th century to the present, that may help us get a handle on what this style of piety has accomplished and signified within American history. *Same as AMS 167*. *Modern*

203. Cultural History of American Religion. (H)
American religious history is happening. Right now. Inside. Outside. Too fast, it seems, to keep up with. On the streets. On your screen. In your body and in the world. This course stages a conversation in hopes of thinking through and across these turbulent times. It is an attempt to conjure a religious history of our present. It is a collaborative experiment pursued under viral conditions, economic uncertainty, political upheaval at home and abroad, and, for the most part, an encroaching governance of algorithms. Topics may include the forms and effects of Protestantism from the Reformation to the present, traditions of religious practice (Native American, Judaism, Catholicism, African American, Occult), imperialism, gender, race, mass media, the impact of capitalism & technology, etc. *Same as AMS 203*. *Modern*

212. Hebrew Bible. (H) (NW)
Study of the writings of the Hebrew Bible. Seeks to understand the historical development of Israel in the biblical period and the religious forms of thought and practice that arose during this time. *Same as JST 212*. *Cooper*

213. The New Testament: Jesus and the Gospels. (H)
A study of the New Testament centered on Jesus and the writings that present his life, teachings and the new religion based around him. Analyzes the origin of the Jewish religious movement arising around Jesus, which became Christianity after his execution and the proclamation of his resurrection by his followers. Course seeks to understand the practices and beliefs of the earliest Christians by examining the earliest Christian writings. Focuses on New Testament gospels, but also examines a selection of apocryphal and gnostic gospels. *Cooper*

215. The New Testament: Paul, the Epistles and Revelation. (H)
A study of the New Testament centered on the letters of the apostle Paul and his role in the transformation of the Jewish religious movement that became Christianity. Analyzes the New Testament writings by Paul and those writings influenced by him (letters written in his name; the book of Acts; and Revelation), as well as the interpretation of his writings by ancient Christians and modern scholars. Course seeks to understand how the conversion of Paul and his missions contributed to the growth and formation of early Christianity. *Cooper*

248. Buddhism. (H) (NW) (WP)
Buddhism is constituted by many traditions that have spread throughout Asia and, more recently, throughout the world. This course surveys some of the most influential forms in both ancient and modern manifestations. We begin with Buddhism in ancient India, then move to Tibet, China and Japan. Finally, we will look at some of the transformations of Buddhism that have occurred as Buddhism has encountered modernity and the West. This course considers multiple dimensions of these traditions including philosophy, meditation, social relations, ethics, art and ritual. *McMahan*

251. Gender and Religion. (H)
How do different religious traditions define and enforce gender identities and sexuality norms? In this course, students will read primary religious source texts as well as writings by historians, anthropologists, and feminist theologians. We will examine the ways that various religious traditions construct hetero-patriarchal dominance, gendering the human

body through text and ritual. Using the insights of feminist theologians, we will read against the grain of scriptural sources, looking for subversive gender identities and feminine conceptions of divinity in order to ask: Can feminism and religion co-exist? *Same as WGS251.* *Feldman*

RELIGION AND CULTURE

235. Destroying Images. (A)
Defacement, destruction, removal, erasure: all are forms of iconoclasm, or "image-breaking." This course is designed to help you make sense of the diverse manifestations of physical assaults on inanimate objects, historically and in the present-day, as the arena in which colliding cultural, political, and social beliefs are exposed. Although we devote the last portion of the course on image-destruction after the election of Barack Obama and in the wake of Black Lives Matter, we begin with the historical and conceptual foundations for image destruction as a social practice found across time and cultures. Exploring the social, cultural, and political investment we place in material objects, we aim to answer the following question: why do we believe that ideas (and in some cases people) live in inanimate objects? *Same as ART/GST 235.* *Aleci*

251. Gender and Religion. (H)
How do different religious traditions define and enforce gender identities and sexuality norms? In this course, students will read primary religious source texts as well as writings by historians, anthropologists, and feminist theologians. We will examine the ways that various religious traditions construct hetero-patriarchal dominance, gendering the human body through text and ritual. Using the insights of feminist theologians, we will read against the grain of scriptural sources, looking for subversive gender identities and feminine conceptions of divinity in order to ask: Can feminism and religion co-exist? *Same as WGS251.* *Feldman*

332. Religion and Politics. (H)
Begins with Christian classics, St. Augustine and Calvin, and their vision of the relation of Christianity to the State or to the pursuit of power and wealth. Moves to the last few centuries, in which a Christian vision has been challenged by thinkers such as Rousseau and Nietzsche. Course ends with readings from the contemporary period, in which the place of Christianity in the public sphere is again shifting. *Cooper*

339. Religion in/on the Brain. (H)
What are the religious roots of the mechanization of psychology and the emergence of the cognitive sciences? How, why, and to what effect has religion become an engineering problem—quite literally a matter of circuits and codes and neural networks—for scientists and supplicants alike? Such questions will inform this semester-long inquiry into the religious history and animating power of the brain. In familiarizing ourselves with both primary and secondary texts from the eighteenth century to the present, we will focus on how the brain has been imagined, constructed, and made real in the key of religion. *Same as STS 339.* *Modern*

341. Israel/Palestine: Beyond the Binary 2020. (H) (NW) (WP)
The Israel/Palestine conflict is often portrayed as an intractable struggle between two diametrically opposed and homogeneous nations. This course challenges that framing by offering students an in-depth encounter with Israeli and Palestinian societies, which contain a multiplicity of political, religious, and ethnic groups. Between the poles of "Israel" and "Palestine" students will discover many other underrepresented identities: Arab Jews, African refugees, foreign workers, Bedouin, and Palestinian feminists (just to name a few). By studying literary works as well as ethnography — first-hand accounts of Israel/Palestine conducted by cultural anthropologists — students will gain an intimate window into the daily life of Palestinians and Israelis and a more nuanced perspective on the conflict as a whole, as a conflict not only involving territorial disputes but contested religious ideologies, experiences of displacement and exile, economic and racial inequality. Students will also have the opportunity participate in skype Q&A sessions with activists working to advance peace in the region. *Same as JST 341.* *Feldman*

AREA STUDIES

JUDAISM

153. Premodern Jewish History:
Jews of East and West Through the Middle Ages. (NW) (S)
Introduction to Jewish history, beginning with first centuries of the Common Era and continuing to the end of the 17th century. Examines central themes and patterns in Jewish history. Readings consist of narrative as well as documentary histories with discussion of different theoretical approaches to the writing of Jewish history. *Same as HIS/JST 153.* *Staff*

154. Jews in the Modern World. (S)
Introduction to Jewish life in the modern era from late 18th century Emancipation and Enlightenment through the present, tracing the transformations of Jewish life. Broad historical sketches are combined with close readings of particular texts, movements and thinkers to flesh out the contours and dynamics of the Jewish experience in the Modern world. Major events of Jewish history of 20th century (the Holocaust, foundation of the State of Israel and mass migration of European Jews to the Americas) are examined through secondary and primary sources. Hoffman *Same as HIS/JST 154.* *Staff*

252. Modern Jewish Thought. (H)
Studies Jewish thinkers from the Enlightenment to the present, through their philosophical writings, political essays, religious reflections and fiction. The chief question was how to make the Jewish tradition adapt or respond to the modern Western State and to modern Western culture. This is a course about the Jews and the West. To what degree is there harmony? To what degree is there conflict? *Same as JST 252.* *Feldman*

405. Selected Studies in Jewish History. (S) (E)
Readings and research on various topics, periods, and problems of Jewish history. *Same as HIS 405.* *Staff*

CHRISTIANITY

RST 384. Soul in Search of Selfhood: The Writings of St. Augustine. (H)
This course will be an intensive study of some of the major writings of Augustine with a view toward obtaining a basic understanding of the main lines of his thought on human existence, free will, justice, the state, and the nature of God. We will focus on his intellectual and spiritual struggles, his mature conceptions of the Christian religion, and his integration of the cultural achievements of Mediterranean antiquity into Christianity. The emphasis will be on understanding Augustine's individual life and thought against the background of his own culture and times. *Cooper*

ISLAM

338. Islamic Law and Ethics. (H) (NW)
An exploration of the Islamic legal tradition (the Shari'a) in both historical and contemporary contexts. This class will familiarize students with the key concepts, categories, and questions connected to the content and application of Islamic law. After a thorough overview of the historical narrative and the conceptual categories of Islamic law, the class shifts to in-depth discussions on critical questions of ethics such as jihad and the limits of just-war, minority rights, history, brain death, and gender.
Tareen

ASIAN RELIGIONS

322. Buddhism in North America. (H) (WP)
Focuses on some of the distinctive forms that Buddhism has taken in North America. Discusses a number of traditions, including Theravada, Zen and Tibetan Buddhism, comparing their American versions with those in Asia and addressing the transformations of various Buddhist traditions to accommodate American lifestyles and views. Also addresses a number of issues pertinent to Buddhism in America and the West, such as Buddhist identity, ethnicity, gender issues, authority and social activism. *Same as AMS 322.* *McMahan*

323. Buddhist Meditation Traditions. (H) (NW) (WP)
Mindfulness and meditation have become ubiquitous in North America -- in therapists' offices, schools, corporations, and even the military. Many who practice meditation have no idea they are doing something rooted in centuries-old Buddhist traditions. This course surveys a variety of Asian Buddhist meditative practices, examines their transformations in North America, and investigates the ways they have been adapted to the modern world, the uses to which they have been put, and the controversies they have engendered. McMahan

337. Hindu Literature and Practice. (H) (NW) (WP)
An exploration of selected thematic elements of Hinduism. Begins with a focus on texts, doctrines, myths and rituals of Hinduism from the early period. This will give us some basic Hindu ideas on selfhood, the nature of the cosmos and divinity, and concepts of gods and goddesses and how one should relate to them. After this, we will look at the modern period beginning with Hindu reformers such as Gandhi and Vivekananda. Then we explore the varied and colorful world of contemporary Hinduism.
McMahan

367. Self, Society and Nature in Chinese and Japanese Religions. (H) (NW) (WP)
A thematic exploration of self, society, nature and their interrelationships as conceived in Chinese and Japanese religions, especially Daoism, Buddhism and Confucianism. Addresses these issues through translations of classical Chinese and Japanese texts and examines how these themes play out in a number of historical periods. We will end with some examples of recent East Asian concepts and practices that embody certain themes in ancient traditions while adapting to the unique challenges of modernity.
McMahan

AMERICAN RELIGION

313. African American Religion. (H)
Surveys a variety of religious traditions and expressions of African Americans throughout the history of the United States. Of particular interest to our study will be the problems of slavery, colonization and racialism as they have been embodied in the history of African American religion. *Same as AFS 313.* *Modern*

ADVANCED SEMINARS IN RELIGIOUS STUDIES

320. Why Religion Matters Today. (H)
This course will introduce students in the humanities, social sciences, and sciences to a conversation about interpreting religion in their respective fields. Students will explore the myriad ways in which religion may be used as a category of analysis in studying all aspects of human life. This course also serves as an advanced introduction to an academic field that prides itself as promoting the arts of interpretation. Modern

490. Independent Study.
Independent study directed by Religious Studies staff. Permission of chairperson and departmental faculty.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Religion, Politics and American History.
Islam in Afghanistan/Central Asia.
Gods of Capitalism.
Pagans, Jews, and Christians.
Religion and Psychology.
The Qur'an.

RUSSIAN

Professor Jonathan Stone, Chair, Dept. of German, Russian & East Asian Languages

Jonathan Stone — *Professor of Russian and Russian Studies*

The Russian program is designed to provide students with linguistic and intellectual tools for a deep understanding of the country's literature, language and culture. It offers minors in Russian language and literature and in Russian studies.

The mission of the Russian program is to expose a broad spectrum of the F&M student body to the language, literature, and culture of Russia; to facilitate the further exploration of these subjects as complements to many other aspects of the F&M curriculum; and to work actively to foster groups of students with a sustained interest in Russia; all in direct contribution to the liberal education of all F&M students and the intellectual development of our college community.

Minors in the Department of Russian are strongly encouraged to study abroad, particularly with F&M's biannual summer travel course to St. Petersburg and Moscow. In recent years, students have also participated in the following programs: University of Arizona programs in Moscow and St. Petersburg; Middlebury College programs in Moscow and Yaroslavl; School of Russian and Asian Studies; Smolny-Bard program in St. Petersburg.

The department offers two minor programs.

A minor in Russian Language and Literature consists of six courses: Three Russian language courses from the following: RUS 102, RUS 201, RUS 202, RUS 301, RUS 302; and three Russian literature courses from the following: RUS 214, RUS 217, RUS 219, RUS 401, or topics courses approved by the department chair.

A minor in Russian Studies consists of six courses: three Russian language courses from the following: three Russian language courses from the following: RUS 102, RUS 201, RUS 202, RUS 301, RUS 302; one Russian literature course from the following: RUS 214, RUS 217, RUS 219, RUS 401, or topics courses approved by the department chair; one Russian history course from the following: HIS 125, HIS 126, HIS 319, or topics courses approved by the department chair; and one Russian culture course from the following: RUS 179 (summer travel course), RUS 216, or topics courses approved by the department chair.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

COURSES TAUGHT IN ENGLISH

All readings, lectures and discussions in these courses are in English (except for those who wish to read in Russian). There are no prerequisites.

125. Imperial Russian History. (S) (WP)
Examines Russian history from Muscovite period through early 20th century, emphasizing interaction of state and society, and how social, political, economic and cultural events influenced tsarist policies, imperial expansion, and the efforts to reform and revolutionize Russian life. *Same as HIS125*. *Schrader*

126. Russia in Revolution. (S)
Covers major historical developments in Russia and Soviet Union from revolutionary era of 1905 to the present. Traces evolution of new political, social and cultural identities, and re-formulation and dismantling of old ones during the Soviet era and beyond. *Same as HIS 126*. *Schrader*

140. Violence, Mayhem and Dissent: Post-Soviet Pop Culture. (H)
This course will explore the relationship between violence and Russian culture's deeply rooted belief in brotherhood. A number of today's Russian works depict violence as the only way to help one's own when corruption abounds and institutions fail. We will discuss how far people are willing to go (and not go) for their communities by examining depictions of violence as both a vice and a virtue in a wide range of materials, including novels, films, YouTube videos, short stories, and documentaries. *Stone*

214. The Russian Novel from Pushkin to Tolstoy. (H)
Study of the emergence of a national literary tradition in 19th-century Russia as it was fashioned by writers and their reading publics. Emphasis on the Russian reaction to traditional Western European forms of narrative and the special status of the Russian writer as a social "moral barometer." Readings will include works by Karamzin, Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky and Tolstoy. All readings will be in translation, with special assignments for those able to read in Russian. *Staff*

216. Business in Today's Russia: Culture, Society, and Capitalism. (H)
This course will focus on the chaotic rise of capitalist business practices in the 1990s and the consequences of Russia's ensuing prosperity in the Putin era. We will come to understand the place of business in Russian political and social life as well as its popular perception in the media and art. Topics to be covered include privatization; Soviet legacies; Russia's natural resources; oligarchs and organized crime; pro and anti-Western sentiment; everyday life in Russia under Yeltsin and Putin.
Same as BOS 216. *Stone*

217. Russia: 20th Century in Print and Film. (H)
The 20th century was a time of unprecedented upheavals and profound changes in Russian society, politics and culture. Russia and its successor state, the Soviet Union, suffered revolutions, wars, bloody civil strife, collectivization and purges. During those unstable and dangerous times and despite official suppression, Russian writers, artists and filmmakers produced outstanding works. In this course we will study the 20th-century Russian experience through its literature and other art forms. All readings will be in English, with special assignments for those able to read in Russian. *Stone*

219. Russia's Literary Titans: Major Works of Tolstoy and Dostoevsky. (H)
Literature of the nineteenth century is dominated by the titanic figures of the great Russian novelists Lev Tolstoy and Fedor Dostoevsky. This course will offer a sustained examination of their careers through reading numerous major works including their masterpiece novels. We will better understand the development of novelistic style and the significance of these authors' philosophical, psychological, and narrative innovations which would become central to all future novelists. *Same as LIT219*.
Stone

COURSES TAUGHT IN RUSSIAN

101. Elementary Russian I.
For students with no knowledge of Russian. Introduction to the contemporary Russian language. The course presents the fundamentals of Russian grammar and syntax with equal emphasis on speaking, writing, reading, aural comprehension, and cultural awareness. Audio and video exercises, simple readings, short compositions, conversational drills. Offered every Fall. *Stone*

102. Elementary Russian II.
Continuation of Russian 101. Prerequisite: Russian 101 or placement. Offered every Spring. *Stone*

201. Intermediate Russian I. (LS)
Vocabulary building, continued development of speaking and listening skills and active command of Russian grammar. Readings from authentic fiction and poetry. Short composition assignments. Prerequisite: Russian 102 or placement. Offered every Fall. *Stone*

202. Intermediate Russian II. (H)
Continuation of Russian 201. Increased mastery of Russian grammatical structures through reading and discussion of authentic literary and cultural texts. Continued emphasis on speaking, reading and writing Russian. Prerequisite: Russian 201 or placement. Offered every Spring. *Stone*

301. Advanced Russian I. (H)
Building upon the foundation developed in Intermediate Russian, this course provides a more detailed and nuanced engagement with Russian language and grammar with particular emphasis on developing advanced reading and writing skills and adding breadth and depth to speaking skills. We will utilize many more examples of "real" Russian texts and materials to become comfortable with Russian as it is used by Russians. Prerequisite: RUS 202 or placement. *Stone*

302. Advanced Russian II. (H)
Continuing the trajectory of RUS 301, this course reinforces advanced reading and writing skills and continues to develop sophisticated speaking skills. This course develops cultural fluency by incorporating complex discussions of Russian life, history, literature, politics, and popular culture into our exposure to the Russian language. Prerequisite: RUS 301 or placement. *Stone*

401. Readings in Russian Literature and Culture. (H)
The primary purpose of this course is to provide students with an opportunity to read literary, cultural, political, and historical texts in the original Russian while improving their active command of the written and spoken language. Prerequisite: RUS 302 or placement. *Stone*

390. Independent Study.

490. Independent Study.

SUMMER TRAVEL COURSE

RUS 179. From Tsars to Commissars:
An Introduction to Russian Culture. (H)
Through an exploration of the literary, artistic, social, and political context, this course will introduce the major aspects of Russian life and culture. By becoming acquainted with the stories of such typically Russian characters and their worlds, we will better understand Russian culture and identity. This course begins with an intensive overview of themes and works seminal in the development of Russian literature, art, history, and politics. The final three weeks of the course will be spent in Russia (primarily St. Petersburg and Moscow) where these themes will be investigated more extensively through a variety of classes, activities, and excursions. *Stone*

SCIENCE, TECHNOLOGY AND SOCIETY

Professor James E. Strick, Chair

MEMBERS OF THE SCIENCE, TECHNOLOGY AND SOCIETY PROGRAM COMMITTEE

James E. Strick	*Professor of Science, Technology, and Society and of Environmental Studies*
Elizabeth De Santo	*Associate Professor of Environmental Studies*
Eric Hirsch	*Assistant Professor of Environmental Studies*

Additional faculty not on the program committee also contribute to this program.

This interdisciplinary program deals with the nature of science and technology, the history and philosophy of science and the interaction of science, technology and human society. The program is designed to make it possible for students to link related work in several disciplines, including a methodology course in at least one of those disciplines. The program has its own courses and it draws on courses given in several departments.

The program offers three distinct minors: History and Philosophy of Science; Science and Society; and Medicine in Society (including study of public health). Each minor is designed to enable students to conceive and pursue individualized programs of interdisciplinary study in these three broad areas, within the field of Science, Technology and Society.

Each minor will consist of six courses, including: a core course that is introductory to the proposed minor; an appropriate mid-level methodology course; three electives; and a capstone course involving substantial work on an individual project, either as independent study or in an advanced seminar. Each student's proposed minor program must be approved by the chairperson of the STS Program, acting in consultation with the STS Committee.

The following lists include courses that are appropriate for each minor. These course lists and designations are not exhaustive; other courses may be appropriate. Some courses listed have prerequisites. Students who do not plan to take those prerequisites in fulfilment of other degree requirements, apart from the STS program, may have to take more than six courses to complete one of the STS minors.

History and Philosophy of Science. Core: STS 136; PHI 213; or an introductory course in any of the natural sciences. Methods: PHI 337; HIS 360; or a second course in a natural science sequence. Electives: STS 311; STS 312; STS 376; STS 383; STS 385; STS 386; STS 387; STS/PSY 489.

Science and Society. Core: STS 136; STS 117; GOV 215. Methods: ECO 210; GOV 250; SOC 302; ANT/WGS 355; ANT 410. Electives: STS 220; STS 223; STS 234; STS 312; STS 313; STS 352; STS 376; STS 383; STS 385.

Medicine in Society. Core: BIO 110, PBH 251. Methods: BIO 210; PSY 230; STS 234; BIO 305. Electives: STS 223; ANT 225; ANT/WGS 355; SOC 330; STS 311; BIO 322; BIO 338; STS 352; STS 383; STS 388; HIS 400; PBH 410; GOV 410; STS/PSY 489.

A major in Science, Technology and Society may be arranged through the Special Studies Program. Students interested in this program are urged to discuss their special interests with the chairperson of STS.

To be considered for honors in STS, graduating seniors, in addition to meeting the College's general requirements for honors, must complete a senior thesis (490).

Minors in the Science, Technology and Society program have studied abroad in the following programs in recent years: School for International Training, Chile; Northwestern University: Public Health in Europe, Paris; Danish Institute for Study Abroad, Copenhagen. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

117. The Environment and Human Values. (S)
Study of historical and modern attitudes toward nature; human use of nature's resources; effects of the growth of science and technology on human uses of and attitudes toward the environment; and the ability of modern humans to substantially alter the environment (e.g., by altering global temperature). Key concepts: human population growth; the notion of "limits to growth"; and the difficulty of managing the use of common pool resources. *Same as ENE 117.* *Bratman, Cann, Hirsch, Strick*

136. Science Revolutions. (NSP)
This course surveys the question of what constitutes a scientific revolution. Beginning with Thomas Kuhn's famous theory in The Structure of Scientific Revolutions (1970), we survey numerous episodes in the development of the sciences, from the seventeenth century to the present. Using case studies from chemistry, physics, life sciences, and the interdisciplinary field of origin of life studies, we try to determine what it would mean for a scientific revolution to occur, would happen, and how to assess whether such a thing might be underway currently. The course in many ways serves as a broad introduction to history and sociology of science. *Strick*

216. Environmental Policy. (S)
Surveys how federal, state and local regulations seek to protect human health and the environment. Introduces frameworks for managing wastes and protecting air quality, water quality and habitats. Reviews policy tools, including economic incentives, penalties and legal obligations. Reviews policy evaluation, focusing on federal statutes, the legislative process that creates them, the role of the judiciary and the success of environmental law in changing practices. Prerequisite: ENE/STS 117 or GOV 100. Offered every semester. *Same as ENE 216.* *De Santo, Cann*

223. Biomedical Ethics. (H)
A survey of ethical issues related to developments in biology and medicine, including controversies at the beginning and end of life, autonomy and informed consent, and limits on medical research. *Same as PHI 223.* *Merli, Mensah*

241. Ancient Medicine. (H) (NSP)
This course is an introduction to the origins and development of Western medicine in Ancient Greece and Rome. Students will read from the sources of the ancient theories and practices of medicine, including epic literature, pre-Hippocratic texts, the Hippocratic corpus, and a number of works

by Galen, widely considered the most accomplished medical researcher in antiquity. These texts will be complemented by selections of texts by the PreSocratics, Plato, and Aristotle that reflect a reciprocal borrowing of vocabulary, argumentation, and diagnostic methodologies between the developing "art of healing" and various classical philosophical texts. All readings will be in English. *Same as CLS 241.* *Fowler*

244. Indigenous Environmental Justice. (S) (NW)
Examination of the way indigenous identity, human rights, and development intersect with the struggle for environmental justice around the world. Analysis of how each term in this course's title is open to legal fixing, activist redefinition, and diverse projects that render the environment something political. Considers distinct case studies drawn from several continents to show that some see being indigenous today as politically potent, while others take this category to be excessively vague or, even, invented; by focusing on ordinary lives and extraordinary struggles, we explore the wide variety of relationships to territory that "indigenous" encapsulates. *Same as ENE 244.* *Hirsch*

258. Contemporary Science Writing. (H)
In this course, we will examine texts ranging from popular science to science fiction, by scientists and nonscientists alike. As readers, we will be interested in the ways people write about science, and, as writers, we will try to put some of these principles into practice. We will be equally interested in the ethical, social, and philosophical questions that contemporary science raises, and in how to probe these questions in writing. *Same as ENG/ENE 258.* *E. Anderson*

260. Nature and Literature. (H)
Readings from a variety of traditions, periods, disciplines and genres to discover diverse assumptions about nature and humanity's relation to it. Readings from both Western and non-Western cultures, though with emphasis on the British and Euro-American traditions. Such broad exploration across vast divides of time and culture should not only teach us about varied understandings of nature but also encourage self-consciousness as we form our own conceptions of what nature is and how we ought best to interact with and in it. *Same as ENG 260.* *Mueller*

311. History of Medicine. (S) (NSP)
The history of medicine with particular attention to American medicine. The relationship between medicine and society is studied in its historical context. We look in detail at some trends in modern medicine and the current debate over national health care policy in light of the history of medicine. *Same as HIS 311.* *Strick*

312. Environmental History. (S)
Examination of various approaches to environmental and ecological history. Focuses on ways in which the physical and biological world have affected human history and on ways in which human social and political organization, economic activities, cultural values and scientific theories have shaped our alteration and conservation of nature. Selected case studies from environmental and ecological history, with emphasis on the 17th through the 20th centuries. *Same as ENE/HIS 312.* *Strick*

313. Nuclear Weapons, Power and Waste Disposal. (S) (NSP)
Development of nuclear technology, beginning with the atomic bomb efforts of WW II. The course deals first with the technology itself, as well as with the ways in which it was embedded in and drove American and international politics, including the arms race and the Cold War. Includes postwar development of civilian nuclear power reactors, creation of the Atomic Energy Commission and the national debate over nuclear power and waste disposal methods. *Same as ENE 313.* *Strick*

315. Health Risks in the Environment.
Known and emerging environmental hazards represent significant public health risks to vulnerable populations. Case studies include lead, tobacco, asthma, nutrition, and endocrine-disrupting compounds as well as common airborne and waterborne chemical and biological pollutants. The course develops an understanding of acute, chronic and cumulative health risks that result from short-term and long-term environmental exposures. Important epidemiological, demographic and environmental justice parameters are incorporated into students' projects that focus on at-risk groups, such as children, the elderly and immuno-compromised individuals. *Same as ENE 315.* *Staff*

318. Environmental History of Latin America. (NW) (S)
This course will examine the intersections of human history and culture with environmental change in Latin America from the early colonial period to the present. The major themes include the consequences and significance of the Columbian Exchange, the roles of religion and culture in shaping human relationships with nature, the development of export-led agriculture, urbanization, and the emergence of diverse environmental movements within Latin America. We will explore the origins of major environmental problems and the ways people have responded to these challenges. The course will also address how historians have approached the study of the environment. *Same as HIS 318.* *Shelton*

337. Philosophy of Natural Science. (H) (NSP)
The goals, methods, assumptions and limitations of natural science. Special attention will be paid to the philosophy of psychology, cognitive science and evolutionary biology. Prerequisite: one prior course in philosophy, or permission of the instructor. *Same as PHI/SPM 337.* *Ross*

351. China and the Global Environmental Crisis. (NW) (S) (WH)
This course links the local to the global, moving from ecological issues within China to related social issues, to global ecological-economic conditions. The course examines specific cases of environmental harm within China; provides a basic environmental-scientific knowledge of these problems; studies the relationship between these cases studies and poverty, government corruption, migration, ethnic conflict, etc.; and analyzes how the above conditions in China are intertwined with global capitalism, global poverty, and other conditions on the global level. *Same as HIS/ENE 351.* *Reitan*

352. Lead Poisoning and Asthma in Urban Lancaster. (S)
Students learn about the epidemiology of asthma and lead poisoning, the pathways of exposure, and methods for community outreach and education. As it is a Community-Based Learning (CBL) course, students will work in service to the local community by collaborating with local school teachers and students in lessons that apply environmental research relating to lead poisoning and asthma in their homes and neighborhoods. They also take soil samples from locations in Lancaster and test their lead levels. *Same as ENE/PBH 352.* *Staff*

362. End of Nature?: Contemporary Anthropocene Literature (H)
Mass extinction, vast gyres of floating garbage, melting polar ice caps, ocean dead zones, rising atmospheric carbon levels, super storms: have we entered the anthropocene -- the geologic "age of man"? The experience of an Earth nowhere untouched by humans finds expression in all genres of literature and generates unfamiliar and compelling new ways of conceiving our species and our world. Readings include science fiction, realist fiction, poetry, non-fiction and theory. It is recommended that students complete at least one college-level literature or environmental studies course before enrolling. *Same as ENG/ENE 362.* *Mueller*

365. History of Occult Knowledge and Pseudoscience. (NSP)
The class will gain a basic familiarity with the history of the occult sciences and pseudoscience. Students will learn about the boundaries between what they define as "bunk" and what they dub "legitimate" science, what is authentic knowledge about nature, and who gets to define what counts as proper science. Likewise, the class will gain skills to understand the nature of science itself and how it operates. *Same as NSP 365.* *Staff*

383. Sex, Lies and Book Burning:
Life and Work of Wilhelm Reich. (S)
Upper level seminar: A survey of the life and work of famous psychoanalyst, controversial laboratory scientist Wilhelm Reich. The course reviews a wide range of Reich's writings from psychology, political science, to biology and physics (95% primary source readings). We also survey the historical context of Austria and Germany 1918-1939 and the U.S. 1939-1957. Finally we look in depth at Reich's clash with the U.S. government over whether scientific work can be judged in a court of law and the government-ordered burning of his books in 1956 and 1960. *Same as HIS/WGS 383.* *Strick*

385. The Darwinian Revolution. (S) (NSP)
This seminar course draws on historical and scientific work to analyze the roots of Darwinian thinking in economics, social policy toward the poor, religious thought, politics and the sciences in which Darwin was

trained. In individual research projects, students assess the ways in which "Darwinism" was applied for social, political, economic and theological purposes, as well as scientific ones. This course provides the historical background necessary for understanding Darwinian biology and the present-day Creation/evolution conflict. Prerequisite: Permission of instructor required for first-year students to enroll. *Same as HIS 385*.
Strick

386. Changing Concepts of the Universe. (NSP)
Historical examination of primitive and early cosmologies to present-day theories of the organization, extent and nature of the universe. Early Greek astronomy to present-day "big bang" theory. Use of simple astronomical instruments to reproduce observations of early astronomers. (Not a laboratory course.) *Same as AST 386*. *Staff*

387. Archaeoastronomy. (NSP)
Fundamental astronomy of ancient cultures; Stonehenge and other stone rings in England and Europe; circles and temples in the Americas, Asia and Africa; time-keeping and calendars; predictions of seasons and eclipses. Methods of analysis; motions of celestial bodies; use of planetarium, celestial globes and grids; surveying of sites. (Not a laboratory course.) *Same as AST 387*. *E. Praton*

370-379. Topics in Science, Technology and Society.
Study of a topic or topics in the relationship between science, technology and society. Topics vary by semester and are offered by the faculty of several academic departments. May be taken more than once if the topic changes. A recent topic has been Social History of Tuberculosis. *Staff*

452. History and Philosophy of Psychology.
The historical origins of contemporary psychology in European philosophy, physiology, and biology, and subsequent development of the schools of structuralism, functionalism, Gestalt, behaviorism, and psychoanalysis. Emphasis on identifying the goals, implicit assumptions, and potential contributions of scientific psychology. Prerequisites: Senior psychology major status or permission of instructor. *Same as PSY 452*.
Cuffari

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

Narratives of Disability.
History of Reproductive Health in Mexico.
COVID-19, Population, and Health Inequalities.

SCIENTIFIC AND PHILOSOPHICAL STUDIES OF MIND

Professor Bennett Helm, Chair

MEMBERS OF SCIENTIFIC AND PHILOSOPHICAL STUDIES OF MIND PROGRAM COMMITTEE

Bennett Helm	*Dr. Elijah E. Kresge Professor of Philosophy*
Stephan A. Käufer	*John Williamson Nevin Memorial Professor of Philosophy*
Jessica Cox	*Associate Professor of Spanish and Linguistics*
Lauren Howard (on leave 2022-23)	*Associate Professor of Psychology*
Joshua Rottman (on leave 2022-23)	*Associate Professor of Psychology*
Elena Cuffari	*Assistant Professor of Psychology*

Additional faculty not on the program committee also contribute to this program.

Scientific and Philosophical Studies of Mind (SPM) seeks to bridge the sciences and the humanities in the study of a common topic: the nature of mind. In order to provide a breadth of perspective as well as depth in an area of special interest, the SPM curriculum divides into two majors: Cognitive Science and Moral Psychology.

Cognitive science is concerned with how minds fit into the natural world. Nature is mechanistic; could the mind be a machine? Can other animals—or even computers or robots—think? What is the (neural?) basis for consciousness? How do minds and mental abilities develop as we mature?

Moral psychology is concerned with what it is for an individual to be a worthwhile and responsible moral agent, and with the psychological processes that lead people to engage in altruistic actions and to evaluate and punish others' behaviors. Can we square our moral assessment of persons with a psychological understanding of the self? What does it take for a life to be significant or meaningful? Are humans primarily motivated toward good or evil? Is a moral sense innate or learned? To what extent do emotion and reason underlie moral judgments and actions?

Successfully bridging the sciences and humanities so as to answer these questions requires that students gain a broad background in both the content and methodology of philosophy and psychology; the courses in the "Core" of the program aim to provide this background. The needed depth is provided in the majors themselves, in which students further hone their skills of critical thinking and philosophical analysis in the context of the interpretation, assessment and even construction of empirical research. The SPM majors culminate in the Senior Research Seminar, in which students conduct research on a topic that combines both philosophical and scientific approaches to the study of a topic of their choosing. Students may also expand their senior thesis with the goal of presenting the project for departmental honors.

Each major offered as part of the SPM program consists of 12 courses. Of these, five courses are required as a part of a common core, and six courses are specific to each of the

majors, designated below. Of these six courses, three must be in the sciences (at least one at or above the 300-level), and three must be in the humanities (at least one at or above the 300-level). The remaining course can be from either major or from the following list: ANT 330; BIO 330; BIO 343; CPS 222; CPS 337; ECO 350; PHI 213; PHI 217; PHI 381.

Students intending to major in SPM are encouraged to take SPM 100 in their first year.

COGNITIVE SCIENCE

Core: SPM 100: Minds, Machines, and Morals; PSY 300 (formerly 230): Design and Statistics; PHI 250: Philosophy of Mind; PHI 337: Philosophy of Natural Science; SPM 499: Senior Research Seminar.

Sciences: CPS 112: Computer Science II; BIO 200: Integrative Biology; BIO 240: Neuroscience; PSY 320: Animal Behavior; PSY 351: Biopsychology; PSY 202: Developmental Psychology; PSY 305: Cognitive Psychology; PSY 306: Evolution of Mind and Intelligence; PSY 309: Social Psychology; PSY 310: Conditioning and Learning; PSY 203: Embodied Cognition; PSY 204: Emotion; PSY 450: Cognitive Development; PSY 453, Nature/Nurture; PSY 460: Advanced Quantitative Methods; CPS 367: Artificial Intelligence; PSY 452: History and Philosophy of Psychology; PSY 48x: Collaborative Research.

Humanities: LIN 101: General Linguistics; LIN 120: Sociolinguistics; LIN/PSY 207: Psycholinguistics; PHI 236: Knowledge and Reality; PHI 244: Symbolic Logic; PHI 331: Free Will; PHI 335: Belief and Knowledge; PHI 339: Philosophy of Language PHI 342: Rational Choice; PHI 353: Phenomenology and Cognitive Science; PHI 351: Mind-Body Problem; PHI 352: Philosophy of Emotions

MORAL PSYCHOLOGY

Core: SPM 100: Minds, Machines, and Morals; PSY 300 (formerly 230): Design and Statistics; PHI 250: Philosophy of Mind; PHI 337: Philosophy of Natural Science; SPM 499: Senior Research

Sciences: SOC 220: Social Psychology; SOC 301: History of Sociological Theory; PSY 202: Developmental Psychology; PSY 206: Personality Psychology; SPM 208: Psychopathology; SPM 309: Social Psychology; PSY 311: Origins of Moral Thought; PSY 201: Cross-Cultural Psychology; PSY 205: Health Psychology; SOC 320: Criminology; SOC 480: Sociology of Law; PSY 460: Advanced Quantitative Methods; PSY 452: History and Philosophy of Psychology; PSY 48x: Collaborative Research.

Humanities: PHI 220: Moral Theory; GOV 241: Classical Political Theory; GOV 242: Modern Political Theory; PHI 319: 20th- Century Continental Philosophy; PHI 331: Free Will; PHI 360: Concept of a Person; PHI 361: Moral Psychology; PHI 362: Love and Friendship; PHI 363: Respect, Responsibility, and Ethics; RST 384: Soul in Search of Selfhood.

Off-Campus Study Programs Most Frequently Attended by Cognitive Science and Moral Psychology Majors:

Budapest Semester in Cognitive Science (fall semester)

F&M in Denmark: Child Development in Cultural Context (Summer Travel Course)

IFSA direct-enroll semester university programs (Australia –Macquarie University and University of Melbourne; New Zealand–University of Auckland; Ireland–University College Dublin)

DIS Copenhagen (semester)

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

Note that courses below marked with an asterisk (*) have prerequisites that do not count toward the SPM major.

I. CORE

SPM 100. Minds, Machines, and Morals.
This course provides an introduction to the central problems, concepts, and methods of cognitive science and moral psychology. We will analyze questions addressing the nature of intelligence, the relationship between minds and bodies, and the basis of moral beliefs and behaviors. These explorations will bridge the sciences and humanities by taking a fundamentally interdisciplinary perspective. *Helmi*

PSY 300. Experimental Design and Statistics.
Descriptive and inferential statistics. Research design as reflected in statistical methods. Analysis of variance designs for independent groups and for repeated measurements. Statistical power and comparison techniques. Prerequisite: PSY 100 or BIO 101/110. Previously PSY 230. *Bashaw, Batres, Roth, Ryan*

PHI 250. Philosophy of Mind. (H)
A general introduction to the philosophy of mind, addressing four key philosophical issues: the nature of psychological explanation; the mind-body problem; the possibility of artificial intelligence; and the nature of persons. Prerequisite: one course in PHI or PSY or SPM. *Helm*

PHI 337. Philosophy of Natural Science. (H) (NSP)
No longer offered. For now, this requirement can be met by taking either PSY 452: History and Philosophy of Psychology or PHI 273: Philosophy of Psychiatry.

SPM 499. Senior Research Seminar.
Intensive research and writing on a topic of the student's choice. Permission of the instructor is required. Offered every Fall. Prerequisites: PHI 250 and PSY 230. *Cuffari*

II. AREAS OF CONCENTRATION

A. COGNITIVE SCIENCE

1. Sciences

200. Integrative Biology. (N)
This course will examine how structure and function in multicellular organisms is integrated. We will explore how a single cell develops into the complex, integrated systems of an organism in which groups of differentiated cells perform specific tasks. We will study specialized cell functions in the context of organismal physiology, and including signaling, metabolism, and transport. Using diverse examples from multiple kingdoms, we will explore how tissues, organs, and organisms

have adaptations optimized for their environments, in order to utilize resources and to maintain homeostasis despite environmental stresses. Prerequisites: BIO 101 and BIO 102. Offered every semester.
Gotsch, Thompson

BIO 240. Neuroscience. (N)
Principles of nervous system function from the molecular through the organ system level as illustrated by the vertebrates and invertebrates. Approximately one half of the course will cover basic cellular principles of nervous system organization, development and physiology. The remaining lectures will consider the role of functionally identified neural networks in behavior control. Prerequisite: BIO 220 or BFB/PSY 302. Offered every Spring. *Same as BFB/PSY 240*. *Jinks*

CPS 112. Computer Science II.*
A second course in computer science and computational thinking, focusing on data structures and advanced programming. Topics include implementation and applications of data structures such as stacks, queues, linked lists, trees and graphs. Also introduces performance analysis of algorithms. Has a required lab, but does not satisfy the Natural Science with Laboratory requirement. Prerequisite: CPS 111.
McDanel, Wilson, Weaver

CPS 367. Artificial Intelligence.*
An introduction to some of the core problems and key ideas in the field of artificial intelligence from a computational perspective. The course will focus on exploring various representational and algorithmic approaches to the problem of creating artificial agents that know things, can reason about the world, and that make good decisions. Key topics: heuristic search, adversarial search, reinforcement learning, constraint satisfaction, logical inference, probabilistic inference. Prerequisites: CPS 222 and CPS/MAT 237. Corequisite: MAT 216. *Wilson*

PSY 202. Developmental Psychology.
An examination of the relative contributions of nature and nurture on children's behavioral, cognitive, and perceptual development from the prenatal period through adolescence. Topics include the development of language, concepts, intelligence, socialization, motor abilities, and emotional understanding, with discussion informed by current and classic primary reading. Research activities and analyses integrated into course work. Prerequisite: PSY100, SPM 100, or a prior philosophy course. Previously PSY 304. (not offered in 2022-2023) *Howard*

PSY 203. Embodied Cognition. (NSP)
Embodied Cognition studies mind as the dynamic, adaptive, meaning-creating activity of bodies in environments. Surveying the foundations of this framework (e.g. ecological psychology, robotics, phenomenology, cognitive linguistics, and social interaction), we will explore the entangled evolutionary histories of agents, environments, and their transactions (including language). Through activities and discussions we will investigate how bodies being bodies together give rise to value, reasoning, action, and experience. Prerequisite: PSY100, SPM100, or a prior philosophy course. Previously PSY 312. Cuffari

PSY 305. Cognitive Psychology.
In this course we will ask how some familiar human behaviors—seeing, classifying, remembering, speaking, reasoning—are possible. We will learn how cognitive scientists go about answering these questions and what some of the classic answers are. The idea is both to introduce some key findings in cognitive psychology and to develop the skills to understand and critically evaluate cognitive psychology research. In addition to lectures, the course will include hands-on experiments and demonstrations; student presentations of individual journal articles; and debates about the broader implications of some cognitive psychology research. Prerequisite: PSY 100 or SPM 100 or permission. Corequisite: PSY 300/230 or BIO 210. (not offered in 2022-2023) *Howard, Iricinschi*

PSY 309. Social Psychology.
This course involves the student in exploration of some of the basic topics in experimental approaches to social psychology, such as cognitive and motivational perspectives on social phenomena, the role of affect and emotion in social action and current uses of the concept of self. Issues explored in this context include self-affirmation processes, regulation of social action and the relationship between affect, cognition and action. Research activities and analyses integrated into coursework. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. (not offered in 2022-2023) *Knowles*

PSY 310. Conditioning and Learning.
An introduction to the process by which human and animal behavior changes as a function of experience. Examines basic mechanisms for learning (including habituation, sensitization and classical and operant conditioning) and explores the scientific and practical application of these mechanisms to explain and predict behavior. Discusses the extent to which learning mechanisms are consistent across species and how the physiology, natural environment and social systems of individual species interact with basic learning processes to produce different behavioral outcomes. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230 or BIO 210. Same as BFB 310. *Lacy*

PSY/BIO 320. Animal Behavior with Lab. (N)
An integrative approach to animal behavior from the perspectives of ethology, behavioral ecology, and comparative psychology. The structure, function, development, and evolution of behavioral adaptations including orientation, foraging and predation, communication, social organization, and reproductive strategies. Observational and experimental research required. Outside class time to work on independent research project. Prerequisites: BIO 101/110 and permission of instructor. Corequisite: either BIO 210 or PSY 300/230, or permission of the instructor. Same as BFB 320. Previously PSY 250. *Roth*

PSY 351. Biopsychology with Lab. (N)
Behavioral and mental processes as viewed from a biological perspective with particular emphasis upon the role of neurochemical and endocrine factors in central nervous system function. Topics covered will include reproduction and gender, chemical senses and ingestion, emotion, learning, sleep and psychopathology. A neuropharmacological approach to the study of the nervous system will be emphasized. Prerequisite: PSY 100 or SPM 100 or BIO 101/110; and PSY 300/230 or BIO 210. Same as BFB351. Previously PSY302. *Roth*

PSY 450. Cognitive Development.
In a matter of months, a zygote goes from a collection of cells to a thinking, feeling, learning baby…who quickly goes on to be a walking, talking, problem-solving toddler…who soon after is a reading, writing, socially- aware child. It's breathtaking! This advanced, discussion-focused seminar explores the foundations of cognitive processes and developmental mechanisms that underpin our fantastic human cognitive growth. As we survey major topics in cognitive development, our focus will be primarily on birth through early childhood, asking the question: How do infants and children make sense of the myriad people, ideas, and objects around them? Prerequisite: PSY 202/304 or PSY 305 or PSY 311. (not offered in 2022-2023) *Casler*

PSY 452. History and Philosophy of Psychology. (N)
The historical origins of contemporary psychology in European philosophy, physiology and biology and subsequent development of the schools of structuralism, functionalism, Gestalt, behaviorism and psychoanalysis. Emphasis on identifying the goals, implicit assumptions and potential contributions of scientific psychology. Prerequisite: Senior psychology major status or permission of instructor. Offered every Fall. *Same as STS 452*. *Cuffari*

PSY 453. Nature/Nurture. (NSP)
One of the most enduring disputes in the field of psychology concerns the degree to which psychological traits are learned or innate. Are genes or socialization responsible for heightened rates of aggression in men? How do biological and environmental factors interact to produce language? Is culture an evolved adaptation? Does it make any sense at all to partition the causes of thinking and behavior into "nature" and "nurture" – or is this a wholly false dichotomy? Throughout this course, we will draw upon cutting-edge research to evaluate a range of theoretical perspectives on the interplay of nature and nurture. We will also discuss the myriad sociopolitical ramifications of this fundamental debate. Prerequisites: PSY 230 and (PSY 301 or PSY 302 or PSY 303 or PSY 304 or PSY 305 or PSY 306 or PSY 307 or PSY 308 or PSY 309 or PSY 310 or PSY 311 or PSY 312 or PSY 313 or PSY 314 or PSY 315 or PSY 317 or PSY 319). (not offered in 2022-2023) *Rottman*

PSY 460. Collaborative Research: Advanced Quantitative Methods. (N)
An examination of complex univariate and multivariate statistical techniques as applied in the context of psychological research. The course will focus on techniques including complex analysis of variance, multivariate regression and correlation, factor analysis, and power and effect size. We will examine published research and conduct research projects to explore the relationship between hypotheses, experimental designs and these statistical techniques. Prerequisites: PSY 300/230 or BIO 210 and one 300-level PSY course. (not offered in 2022-2023)
Bashaw

PSY 464. Evolution of Mind and Intelligence.
What is intelligent behavior, what is it for, and how did it evolve? We will attempt to answer these questions and understand the nature and development of Mind from a comparative perspective. We will do so by investigating learning, perception, memory, thinking, and language in animals and humans. Research activities and analyses integrated into course work. Prerequisites: BIO 210 or PSY 300/230; and BIO 336, BIO 337, PSY 203, PSY 311, or PSY 320. Previously PSY306. (not offered in 2022-2023)

480. Collaborative Research: Animal Behavior and Models. (N, CR)
Students will work in teams to generate a research question, design a study, earn institutional ethics approval, collect and analyze data, and disseminate their findings on questions focused on non-human animals. Projects may aim to better understand the animals themselves or use animals as models for human behavior. Research areas within this collaborative course may include any aspect of animal behavior in the field or in the laboratory. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230 or BIO 210; and PSY 203/312, PSY 310, PSY 320/250, PSY 351/302, PSY 357/303, or PSY 464/306; or permission. Same as BFB/SPM 480. (not offered in 2022-2023)

482. Collaborative Research: Human Behavior Through a Social or Evolutionary Lens. (N, CR)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include experimental social psychology and/or evolutionary psychology. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 204/319, PSY 206/307, or PSY 309; or permission.
Knowles, Staff

483. Collaborative Research: Human Cognition in Context. (N, CR)
Students will conduct experimental research to shed new light on the manifold manifestations of human cognition. This will involve an in-depth consideration of empirical and theoretical issues in cognitive science and cognitive psychology, including embodied and enactive approaches. Research topics will be chosen based on student interest. Techniques for designing, conducting, analyzing, and presenting empirical research will be discussed, practiced, and implemented. Prerequisites: PSY 300/230; and PSY 201/315, PSY 202/304, PSY 203/312, PSY 305, or PSY 311; or permission.
Cuffari, Iricinschi

486. Collaborative Research: Human Physical and Mental Health. (N, CR)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include psychopathology, health psychology, public health, and/or community psychology. Research topics will reflect student interest and the expertise of the course instructor. Projects use a variety of methods - including both quantitative and qualitative approaches. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 205/317, PSY 208/308, or PSY 357/303; or permission.
Penn

2. Humanities

LIN 101. Introduction to Linguistics.
Through course readings, class discussions, problem solving and group work, students will explore the core components of human language; speech sounds, word formation, sentence structure, and meaning. Provides numerous opportunities for students to use theoretical knowledge and apply it to analyzing the structure of other languages.
Armstrong

LIN 120. Sociolinguistics.
An exploration of the relationship between language, culture and society. Special attention will be paid to language variation (styling and codes, dialects, creoles and pidgins) and language in society (multilingualism, language prejudice, identities). Readings, films, discussions and group work will prepare students for field work.
Armstrong

LIN/PSY 207. Psycholinguistics.
This course explores language in the mind and brain, including: How do children learn their first language(s) and why is it such a different experience for an adult to learn a language? What are language disorders? Is spoken language processed differently from written language? What about sign languages? Class will include discussions, presentations, and hands-on analysis of language data. Prerequisite: LIN 101 or PSY 100. Same as LIN 207. Previously PSY 340.
Cox

PHI 236. Knowledge and Reality. (H) (ME)
This class is an advanced, but accessible, introduction to two central branches of philosophy: epistemology and metaphysics. Epistemology, loosely characterized, is the study of knowledge. Metaphysics, even more loosely characterized, is the study of the general features of reality. We'll work through some of the central topics that fall under these two studies.
Kroll

PHI 244. Symbolic Logic. (H)
Deductive reasoning, emphasizing primarily symbolic techniques; some discussion of issues in the philosophy of logic.
Kroll

PHI 331. Free Will. (H)
An examination of contemporary theories concerning the nature of free choice. Special attention is given to the nature of moral responsibility and the relationship between free choice and determinism. (not offered in 2022-2023)
Kroll

PHI 335. Belief and Knowledge. (H)
Investigation of some issues in contemporary epistemology, including the competing analyses of the concept of justification, the case for skepticism, and the analysis of the concept of knowledge. Prerequisite: One prior philosophy course or permission. (not offered in 2022-2023)
Ross

PHI 339. Philosophy of Language. (H)
Investigation, based on contemporary writings, of the diverse functions served by language, of its conceptual presuppositions, and of its relationships to other symbolic media. Prerequisite: One prior Philosophy course or permission.
Kroll

PHI 342. Rational Choice. (H)
An introduction to decision theory; topics include the rationality of the policy of nuclear deterrence, the rationality of pursuing self-interest in every situation, the impossibility of devising a democratic voting procedure, the irrationality of accepting all that is probable, and others. Less frequently offered. Fulfills the ME requirement for the Philosophy major. (not offered in 2022-2023)
Ross

PHI 351. Mind-Body Problem. (H)
A philosophical examination of the apparently problematic relationship between the mind and the natural world. Prerequisite: One prior Philosophy course or permission.
Helm

PHI 352. Philosophy of Emotions. (H)
Detailed philosophical investigation of the emotions, focusing on the implications the study of emotions has for the mind-body problem, the nature of consciousness and intentionality, and the nature of rationality. How are emotions related to other mental states like beliefs, desires, and bodily sensations? What distinctive contribution, if any, do the emotions make to our mental lives? Prerequisite: one prior Philosophy course. (not offered in 2022-2023)
Helm

PHI 353. Phenomenology and Cognitive Science. (H)
In-depth study of phenomenology, covering both its history and contemporary debates, and phenomenology-inspired research in cognitive science and psychology. Prerequisite: One prior Philosophy course and one prior Psychology course. *Same as PSY 353*. (not offered in 2022-2023) *Käufer*

TOPICS COURSES IN COGNITIVE SCIENCE EXPECTED TO BE OFFERED IN 2022-2023

See program chairperson for information on what major requirements particular special topics offerings satisfy.

PHI 171. Better Reasoning.
PHI 273. Philosophy of Psychiatry.

B. MORAL PSYCHOLOGY

1. Sciences

201. Cross-Cultural Psychology.
Cross-Cultural Psychology serves as an introduction to the relationships among cultural processes, human consciousness, human health and human development. Prerequisite: PSY 100 or SPM 100. Same as AFS 201. Previously PSY 315. *Penn*

PSY 202. Developmental Psychology.
An examination of the relative contributions of nature and nurture on children's behavioral, cognitive, and perceptual development from the prenatal period through adolescence. Topics include the development of language, concepts, intelligence, socialization, motor abilities, and emotional understanding, with discussion informed by current and classic primary reading. Research activities and analyses integrated into course work. Prerequisite: PSY100, SPM 100, or a prior philosophy course. Previously PSY 304. (not offered in 2022-2023) *Howard*

PSY 205. Health Psychology.
This course explores the complex factors that affect human health, specifically examining how health and health-related behavior is influenced by the interrelationship of multiple environmental and individual factors ranging from individual personality to health policy. This course also examines the fundamental principles and theories of Health Psychology and how theoretical and empirical findings are applied to improve the health of individuals and groups. Prerequisite: PSY 100 or SPM 100 or BIO 101/110. *Same as PBH 205*. Previously PSY 317. (not offered in 2022-2023) *Abbott*

PSY 206. Personality Psychology.
This course provides an evaluative and comparative overview of major models of personality selected to illustrate psychodynamic, trait, cognitive, humanistic, physiological, and learning approaches. The course will emphasize the testability of the models and their connection with current research. Research activities and analyses integrated into course work. Prerequisite: PSY 100 or SPM 100. Previously PSY 307. (not offered in 2022-2023) *Staff*

PSY 208. Psychopathology.
This course will serve as an introduction to descriptive and theoretical approaches to the study of psychopathology. In addition to the study of disease-related processes, special emphasis will be placed upon developing an understanding of those biological, psychological and social conditions that are essential for healthy psychosocial functioning across the life span. Prerequisite: PSY 100 or SPM 100. Previously PSY 308. *Penn*

PSY 309. Social Psychology.
This course involves the student in exploration of some of the basic topics in experimental approaches to social psychology, such as cognitive and motivational perspectives on social phenomena, the role of affect and emotion in social action and current uses of the concept of self. Issues explored in this context include self-affirmation processes, regulation of social action and the relationship between affect, cognition and action. Research activities and analyses integrated into coursework. Prerequisite: PSY 100 or SPM 100. Corequisite: PSY 300/230. (not offered in 2022-2023) *Knowles*

PSY 311. Origins of Moral Thought.
Moral values define us, unite us, and give meaning to our lives. How have we come to hold our particular moral convictions? We will examine this question on three different timescales: millennia (human evolution), centuries (cultural dynamics), and years (child development). Students will evaluate and synthesize insights from psychology, philosophy, biology, anthropology, economics, and history in order to understand the manifold origins of moral beliefs and behaviors, thus challenging existing values and cultivating improved abilities to create a better future. Prerequisite: PSY 100 or SPM100 or placement. Corequisite: PSY 230. (not offered in 2022-2023) *Rottman*

PSY 452. History and Philosophy of Psychology. (N)
The historical origins of contemporary psychology in European philosophy, physiology and biology and subsequent development of the schools of structuralism, functionalism, Gestalt, behaviorism and psychoanalysis. Emphasis on identifying the goals, implicit assumptions and potential contributions of scientific psychology. Prerequisite: Senior psychology major status or permission of instructor. *Same as STS 452*. *Cuffari*

PSY 460. Collaborative Research: Advanced Quantitative Methods. (N)
An examination of complex univariate and multivariate statistical techniques as applied in the context of psychological research. The course will focus on techniques including complex analysis of variance, multivariate regression and correlation, factor analysis, and power and effect size. We will examine published research and conduct research projects to explore the relationship between hypotheses, experimental designs and these statistical techniques. Prerequisites: PSY 300/230 or BIO 210 and one 300-level PSY course. (not offered in 2022-2023) *Bashaw*

PSY 480. Collaborative Research: Animal Behavior and Models. (N)
Students will work in teams to generate a research question, design a study, earn institutional ethics approval, collect and analyze data, and disseminate their findings on questions focused on non-human animals. Projects may aim to better understand the animals themselves or use animals as models for human behavior. Research areas within this collaborative course may include any aspect of animal behavior in the field or in the laboratory. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230 or BIO 210; and PSY 203/312, PSY 310, PSY 320/250, PSY 351/302, PSY 357/303, or PSY 464/306; or permission. *Same as BFB/SPM 480*. (not offered in 2022-2023) *Staff*

PSY 482. Collaborative Research: Human Behavior Through a Social or Evolutionary Lens. (N)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include experimental social psychology and/or evolutionary psychology. Research topics will reflect student interest and the expertise of the course instructor. Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 204/319, PSY 206/307, or PSY 309; or permission. *Knowles, Staff*

483. Collaborative Research: Human Cognition in Context. (N)
Students will conduct experimental research to shed new light on the manifold manifestations of human cognition. This will involve an in-depth consideration of empirical and theoretical issues in cognitive science and cognitive psychology, including embodied and enactive approaches. Research topics will be chosen based on student interest. Techniques for designing, conducting, analyzing, and presenting empirical research will be discussed, practiced, and implemented. Prerequisites: PSY 300/230; and PSY 201/315, PSY 202/304, PSY 203/312, PSY 305, or PSY 311; or permission. *Cuffari, Iricinschi*

486. Collaborative Research: Human Physical and Mental Health. (N)
Students will work in research teams to generate a research question, design a study, collect and analyze data, and disseminate their findings. Research areas include psychopathology, health psychology, public health, and/or community psychology. Research topics will reflect student interest and the expertise of the course instructor. Projects use a variety of methods - including both quantitative and qualitative approaches.

Laboratory research required. Prerequisites: PSY 300/230; and PSY 201/315, PSY 205/317, PSY 208/308, or PSY 357/303; or permission. *Penn*

SOC 220. Social Psychology.*
Study of the relationship between self and society, as seen through sociological social psychology. Examination of the genesis of the social psychological framework in both psychology and sociology, and consideration of its applications within sociology today. Emphasis on symbolic interaction and related theories. Topics include the study of language and talk; the relationships between role, identity and self; sociology of emotions; socialization and the role of all of these in the creation, maintenance, and change of social structures.
Prerequisite: SOC100. *Cannon*

SOC 301. History of Sociological Theory.*
A critical examination of the development of social thought from the Enlightenment to the early Twentieth Century. The main focus is on past attempts to explain the nature of capitalism and its attendant transformation of family, work, and community. In addition, the course probes the question of how shared ideals and divisive interests affect both the internal coherence of human society and the study of human society as well. Prerequisite: SOC100. *Singer*

SOC 320. Criminology.*
Surveys theoretical and empirical efforts to study crime, crime causation, and punishment. Special attention paid to the historical origins and development of notions of criminal responsibility, trial defenses, and the courtroom division of labor. Sociological, psychological, and biological explanations of criminal behavior are examined along with research attempts to study the development of delinquent and criminal careers. Prerequisite: SOC100. (not offered in 2022-2023) *Staff*

SOC 480. Sociology of Law.*
Application of sociological theory and methodology to the study of law and its relationship to the social order. Examination of conditions under which nonlegal norms and values become reinforced within the legal institutions of a society. Topics covered include the role of law in social change, the interface of law and psychiatry, and the study of law as a profession. Prerequisite: SOC100 or permission of the instructor. (not offered in 2022-2023) *Staff*

2. Humanities

GOV 241. Classical Political Theory. (H)
Examination of important texts in classical Greek and Roman political thought, including the writings of Plato, Aristotle, and other relevant authors. Explores how ancient political theory sheds lights on contemporary politics, including issues of democracy, citizenship, globalization, and international relations. *Hammer*

GOV 242. Modern Political Theory. (H)
Examination of the political theories of Hobbes, Locke, Rousseau, Marx, and one contemporary thinker, with emphasis on alternative views of the social contract, liberalism, and radicalism. *Datta*

PHI 220. Moral Theory. (H)
A careful study of classic texts in moral philosophy, with an emphasis on questions about the foundations of ethics and the objectivity of moral judgement. *(not offered in 2022-2023)* *Merli*

PHI 319. 20th-Century Continental Philosophy. (H)
Close examination of emergence of modern phenomenology and hermeneutics. with particular attention to Heidegger's Being and Time. Prerequisite: one prior course in philosophy or permission of the instructor. (not offered in 2022-2023) *Käufer*

PHI 331. Free Will. (H)
An examination of contemporary theories concerning the nature of free choice. Special attention is given to the nature of moral responsibility and the relationship between free choice and determinism. (not offered in 2022-2023) *Kroll*

PHI 360. Concept of a Person. (H)
A careful examination of what it is to be a person, as an autonomous moral agent whose life can be meaningful and of what distinguishes persons from the "lower" animals. Prerequisite: one prior course in philosophy, or permission of the instructor. *Helm*

PHI 361. Moral Psychology. (H)
Moral psychology is the study of human moral agency. As such, it is constrained by, and must cohere with, the facts about human psychology; but its primary focus is on human good, an evaluative notion. Central questions include: What are reasons and what role do they play in action? What is character and how is it related to virtue? What is free will, can we have it and how do we best explain weakness of the will? Prerequisite: one prior course in philosophy, or permission of the instructor. (not offered in 2022-2023) *Helm*

PHI 362. Love and Friendship. (H)
Investigation of philosophical aspects of love and friendship, examining a variety of accounts of what they are as well as questions concerning their justification, their bearing on the autonomy and identity of the individual, and the place their value has within a broader system of the values, including moral values. Prerequisite: one prior Philosophy course. (not offered in 2022-2023) *Helm*

PHI 363. Respect, Responsibility, and Ethics. (H)
Recently many philosophers have argued that certain interpersonal emotions, such as resentment, indignation, guilt, gratitude, and approbation, are fundamental to a host of interconnected issues in ethics, including the nature of respect, dignity, freedom and responsibility, and the origins of moral values. This class will closely examine these claims and arguments with the aim of understanding more clearly how moral psychology and metaethics intersect. (not offered in 2022-2023) *Helm*

RST 384. Soul in Search of Selfhood: The Writings of St. Augustine. (H)
This course will be an intensive study of some of the major writings of Augustine with a view toward obtaining a basic understanding of the main lines of his thought on human existence, free will, justice, the state, and the nature of God. We will focus on his intellectual and spiritual struggles, his mature conceptions of the Christian religion, and his integration of the cultural achievements of Mediterranean antiquity into Christianity. The emphasis will be on understanding Augustine's individual life and thought against the background of his own culture and times. (not offered in 2022-2023) *Cooper*

TOPICS COURSES IN MORAL PSYCHOLOGY EXPECTED TO BE OFFERED IN 2022-2023

See program chairperson for information on what major requirements particular special topics offerings satisfy.

PHI 273. Philosophy of Psychiatry.
PHI 373. End of Life Ethics.

SOCIOLOGY

Professor Caroline Faulkner, Chair

Katherine E. McClelland	*Professor of Sociology*
Caroline Faulkner	*Associate Professor of Sociology*
Jerome I. Hodos (on leave 2022-23)	*Associate Professor of Sociology*
Ashley C. Rondini	*Associate Professor of Sociology*
Amy Singer	*Associate Professor of Sociology*
Emily Marshall	*Assistant Professor of Sociology and Public Health*
Firuzeh Shokooh Valle (on leave 2022-23)	*Assistant Professor of Sociology*
Bryan Cannon	*Visiting Assistant Professor of Sociology*

Sociology is both a specialized academic discipline and an important part of a liberal education. As a social and cultural science, sociology studies human interaction within and between groups, the forces of interest and meaning that help to shape and reshape that interaction and its consequences for the lives of individuals and social groups. As one of the liberal arts, sociology enriches the study of history, philosophy, science and the arts and assists students in examining their personal lives, professional activities and public issues in a more thoughtful and critical way. In both capacities, and as our graduates attest, the study of sociology can be excellent preparation for a wide range of careers including law, education, business, government service, medicine and social work.

A major in Sociology consists of a total of twelve courses, eight of which are Sociology classes, and four of which are in related social sciences. The eight Sociology courses must include SOC 100, 301, 302 and a 400-level seminar or Independent Study, along with any other four Sociology courses (though see below for recommended classes). Of the additional four courses in related social sciences, two must be in a single department, and one of these must be above the 100 level. Related social sciences include the following: 1) All courses in Anthropology (ANT), Economics (ECO), Government (GOV) and History (HIS); 2) All courses in other departments cross-listed with Anthropology, Economics, Government and History; 3) Courses in Africana Studies (AFS), American Studies (AMS), Judaic Studies (JST), Women's and Gender Studies (WGS) and Science, Technology and Society (STS) that are cross-listed with Anthropology, Economics, Government or History or that have a social science (S) designation; 4) LIN 120 (Sociolinguistics); 5) Selected courses in Business, Organization, and Society (BOS) and Psychology (PSY). Students should consult their adviser in Sociology with questions about the related social science courses.

SOC 100 is a prerequisite to all other courses in the department. Prerequisites may be waived only by the instructor.

The writing requirement in the Sociology major is met by completion of the normal courses required to complete the major.

Although SOC 210 and SOC 220 are not required courses, students contemplating a major in Sociology are encouraged to take these courses early in the major sequence as these subjects are important for upper-level courses. Additionally, we suggest that majors and minors complete SOC 301 (Theory) and SOC 302 (Methods) prior to the start of their senior year where possible, as these classes provide background and skills that are helpful for independent studies and 400-level seminars.

A minor in Sociology consists of a total of six courses, including SOC 100, 301 and 302, and three other courses.

Majors in the Department of Sociology have studied abroad in the following programs in recent years: School for International Training in Santiago, Chile; Cape Town, South Africa; and Buenos Aires, Argentina; Institute for the International Education of Students in Barcelona, Spain and Buenos Aires; Danish Institute for Study Abroad in Copenhagen, Denmark; Institute for Study Abroad in Australia and Scotland; Syracuse University Abroad in Florence and Madrid. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

100. Introductory Sociology. (S)
Introduction to the basic concepts, theories and methods used to study human social interaction and social structures. Readings and topics vary section to section, but typically address social stratification (primarily by race, class and gender) and its impact on individual and social life, the sources of social order and social change, deviance and social control and the interrelations between individuals and society. Prerequisite to all other departmental offerings. *Staff*

210. Class, Status and Power. (S)
A comparative survey of theories and research on inequality. Geographic patterns of inequality will be a main theme, in addition to racial, economic and political varieties. Covers both developed and developing countries. Past case studies have included Britain, South Africa and Brazil. Prerequisite: SOC 100. *Hodos*

220. Social Psychology. (S)
Study of the relationship between self and society, as seen through sociological social psychology. Examination of the genesis of the social psychological framework in both psychology and sociology and consideration of its applications within sociology today. Emphasis on symbolic interaction and related theories. Topics include the study of language and talk; the relationships between role, identity and self; sociology of emotions; socialization; and the role of all of these in the creation, maintenance and change of social structures. Prerequisite: SOC 100. *Cannon, McClelland*

301. History of Sociological Theory. (S)
An examination of the development of social thought from the Enlightenment to the early 20th century. Main focus on past attempts to explain the nature of capitalism and its attendant transformation of family, work and community. Course probes the question of how shared ideals and divisive interests affect both the internal coherence of human society and the study of human society as well. Prerequisite: SOC 100 plus any other SOC course. *Hodos, Shokooh-Valle, Singer*

302. Sociological Research Methods. (S)
Strategies and design of sociological research, including: the development of hypotheses; operationalization of concepts; ethics; and data collection, analysis and presentation. Special attention given to the methods of survey research, use of a statistical package and tabular analysis. Prerequisite: SOC 100. *Faulkner, Marshall, McClelland*

310. Urban Sociology. (S)
An introduction to the sociological study of cities. Course has a three-part focus on classic materials and theories, typical research methods and data, and development of US cities. Topics include migration, gentrification, poverty, race/ethnicity, urban politics, housing, suburbanization, and more; students will also practice ethnography as a research method and work with census data. Cities discussed include Philadelphia, Lancaster, Boston,

Chicago, Los Angeles, and more. Prerequisites: SOC 100. *Hodos*

320. Criminology. (S)
Surveys theoretical and empirical efforts to study crime, crime causation and punishment. Special attention paid to the historical origins and development of notions of criminal responsibility, trial defenses and the courtroom division of labor. Sociological, psychological and biological explanations of criminal behavior are examined along with research attempts to study the development of delinquent and criminal careers. Prerequisite: SOC 100. *Staff*

330. Sociology of Medicine. (S)
An examination of the social and cultural factors which influence the occurrence, distribution and experience of illness, the organization of medical care in American society and its rapidly escalating costs, the technical and ethical performance of physicians and the ethical dilemmas associated with modern medicine. Prerequisite: SOC 100. *Marshall*

342. Political Sociology. (S)
Rule and resistance have been extremely productive focii in contemporary analyses of the nature and forms of power. In this seminar we will draw on this rich vein of inquiry to analyze the social formations that constitute the substance of political sociology—state, economy, and society. In the course of engaging with the sociology of politics we will also be examining how the ways in which we interpret social reality are caught up in the practice of power, i.e. the politics of sociology. Prerequisite: SOC 100. *Hodos*

345. Sociology of Sexuality. (S)
This course examines the idea that sex is not a natural act; instead, sex and human sexuality are socially constructed. We will examine how power—in a variety of forms—is at play in our social and cultural understandings and experiences of sex and sexuality. We will examine a variety of approaches to the study of sexuality as we consider sex, gender and sexual orientation, sexual relationships, the body, race/ethnicity, the commodification of sex, reproduction and contraception, and sexual violence. Prerequisite: SOC 100 or WGS 210. *Same as WGS 345*. *Faulkner*

350. Sociology of Gender. (S)
This course introduces students to major theories and findings in sociology of gender, including the incorporation of global/transnational concerns. The course focuses on the constraints that the social construction of gender imposes on men, women, and LGBTQI/non-binary/gender non-conforming individuals, and helps students develop a critical analysis of gender as a social institution. It examines the intersections of gender with race, class, and sexuality, among other social locations, incorporating postcolonial/decolonial, queer, feminist, and science and technology theories. Prerequisite: SOC 100 or WGS 210. *Same as WGS 350*. *Shokooh-Valle*

355. The Sociology of Culture. (S)
This course considers the place of culture in social life and examines its socially constituted character. Treating culture as sets of distinctive practices, symbolic representations, and domains of creative expression, the course will investigate how these vary across specific social, historical, and institutional locations. Topics will include such matters as the relationship between culture and social inequality, culture and social change, the commoditization of cultural goods, and how cultural forms are used, appropriated, and transformed by social groups. Prerequisite: SOC 100. *Singer*

360. Race and Ethnic Relations. (S)
Study of intergroup relations, with an emphasis on processes of racial/ethnic stratification, assimilation and cultural pluralism. Focus is on American society, past and present. Topics include the development and change of race/ethnic identities, intergroup attitudes, racial ideologies, immigration, education and the intersection of race with social class and gender. Prerequisite: SOC 100. *Same as AFS 360*. *Rondini*

364. Sociology of the Family. (S)
Sociologists argue that the family occupies a contradictory location—as both a very private and public institution. In this course, we examine the family and its changing nature through a sociological lens. We focus on the diversity of family forms and family experiences, particularly across race-ethnicity, class, and gender lines. We consider family theories and historical variations in American family forms. We also analyze varieties in childbearing and childrearing experiences both in the U.S. and abroad. Prerequisite: SOC 100. *Same as WGS 364*. *Faulkner*

366. Race, Ethnicity, and Health. (S)
The course will utilize a sociological lens to examine the role of race and ethnicity in health outcomes, healthcare experiences, medical research, and clinical practice. Topics will include: socio-historical perspectives on notions of race in relation to biological difference; socio-historical understandings of the health consequences of racialized public health policies and politically sanctioned medical practices;contemporary racial and ethnic disparities in disease morbidity and mortality indicators; the operationalization of racial categories in epidemiological, public health, and biomedical research and practice; contemporary debates regarding race and genomics; and understandings of racial and ethnic dynamics in relation to health and medicine at the intersections of socioeconomic class, immigration status, gender, sexuality, and other markers of social identity. *Same as AFS/PBH 366*. *Rondini*

370–379, 470–479. Topics in Sociology. (S)
A single problem area of major importance in sociology. The content may change from semester to semester. Different topics may be taken for credit more than once.

384. Urban Education. (S)
A community-based learning course analyzing issues facing urban schools from a sociological perspective, with particular attention to the role of race, class and gender at both the macro and micro levels. Other topics include teachers, schools as organizations, the social psychological perspective on learning, the politics of curricula and instruction, accountability and other contemporary reform movements. Students are expected to integrate and apply their knowledge through work in a local school. Prerequisite: SOC 100. *Same as PUB 384*. *McClelland*

SEMINARS

410. Globalization. (S)
An in-depth investigation of economic, political and cultural aspects of globalization. Topics include migration, economic inequality, transnational social movements, development and trade, the future of the nation-state, urbanization and culture/media. Students will be expected to write a substantial research paper.Prerequisites: SOC 100 and either SOC 210 or IST 200. *Hodos*

425. iSoc: The Impact of Technology on Individuals, Relationships, and Society. (S)
Technology is a part of our daily lives, yet we do not often pause to consider the extent to which we rely on it and the ways in which it has an impact on our identities and our lives as social beings. The goal of this course is to explore how technology, particularly information and communication technology, in the 21st century influences important aspects of our social world, including relationships, work, education, health, music, and social movements. We will explore key concepts, issues, dilemmas, and debates regarding the constantly evolving, complex relationship between human beings and technology. Prerequisite: SOC 100.

440. Sociology of Food. (S)
This seminar will investigate a broad and familiar topic—food—through the analysis of its various social and institutional contexts. We will explore how what we eat, and how we eat it, expresses our social identities and group memberships; how food consumption is connected to inequalities and status anxieties; how the economic and agricultural systems that produce and market food affect our lives; and finally how food is both an object and a subject of politics. *Singer*

450. Comparative Racial-Ethnic Relations. (S)
In this course, we will be examining the constructedness of race and ethnicity and racial-ethnic categories over time and space, examining the United States (including a discussion of West Indian immigrants), Brazil, South Africa, and other cultural contexts. We will begin with a consideration of theories of race and ethnicity focusing on the theory of racial formation. For each of our cultures of focus, we will examine both the historical contexts under which understandings of race and ethnicity developed as well as more contemporary issues of race and ethnicity. We will consider the effects of globalization on racial-ethnic constructions

in the United States and elsewhere to understand the complexities and malleability of lived racial-ethnic experiences across cultures. Prerequisite: SOC 100. *Faulkner*

460. Race, Gender, and Class on Campus. (S)
On college and university campuses across the country, intersecting social identity politics have come to the fore over the course of recent decades. This course will examine the socio-historical forces and contemporary dynamics that inform, challenge, support, and disrupt the establishment and cultivation of inclusive campus communities. Drawing from sociological literature on higher education, social mobility, race, gender, socioeconomic class, and social policy, students will critically analyze the complex issues germane to how American institutions of higher education operationalize ideas of "diversity" and "inclusion" in the 21st century. *Same as AFS/WGS 460.* *Rondini*

480. The Sociology of Law. (S)
Examines historical and contemporary schools of jurisprudence: the judicial selection of precedents for legal decision-making. Particular attention paid to conflicting claims regarding the purpose and consequences of law, competing schools of legal interpretation emerging from the writings of Marx, Durkheim and Weber and contemporary political and social debates touching on legal rights. Individual student papers are distributed to seminar participants for presentation and debate. Prerequisite: Sociology 320 or permission of instructor. *Staff*

490. Independent Study. (S)
Independent study directed by the Sociology staff. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

370. Covid19, Population, and Health Inequalities.
372. Sociology of Emotions.
471. Intimate Markets.
472. Sexual Fields.

SPANISH

Professor Jessica Cox, Chair

Kimberly M. Armstrong	*Professor of Spanish and Linguistics*
Sofía Ruiz-Alfaro	*Professor of Spanish*
Veronika Ryjik *(on leave 2022-23)*	*Professor of Spanish*
Carmen C. Tisnado	*Professor of Spanish*
Beatriz Caamaño Alegre	*Associate Professor of Spanish*
Jessica G. Cox	*Associate Professor of Spanish and Linguistics*
M. Elena Aldea Agudo *(on leave Spring 2023)*	*Senior Teaching Professor of Spanish*
Jialing Liu	*Senior Teaching Professor of Spanish*
Ana Anderson	*Director, Spanish Language Writing Center and Teaching Professor of Spanish*
Anne Stachura	*Coordinator, Spanish Community Based Learning and Community Outreach*

Spanish is the second most common spoken language in the world, and its increasing presence in the socioeconomic, political and cultural life of the United States makes the study of Spanish a valuable professional tool and enriching personal experience for those students interested in pursuing a major or minor in the language. Spanish majors and minors develop an advanced level of oral and written proficiency in the language by engaging meaningfully with cultural products and practices from the Spanish-speaking world. Furthermore, our courses foster multicultural competence as students engage with cultural and literary traditions of Spain, Latin America, and the United States.

A major in Spanish consists of nine courses above SPA 202. The required courses are: SPA 221, 222 and 321. In addition, each student must take five elective courses among the 300-400-level offerings in the department. During their senior year, students must take one additional 400-level Research Seminar. In this final course, students prepare a substantial research project, satisfying upon its completion the writing requirement for the major. All courses for the major should be in Spanish.

A major in Spanish includes knowledge and analysis of language, literature, and cultures in the Spanish-speaking world, including Spain, Latin America, and the United States. We strive to help students achieve a high degree of proficiency in the language by developing their ability to comprehend, read critically, speak and write in Spanish while developing an appreciation and understanding of Hispanic literature and cultures. Beginning in SPA 101, course work is conducted entirely in the target language, and the student is encouraged to use Spanish beyond the classroom. The department offers Community Based Learning opportunities in the Lancaster Hispanic/Latinx community that further enhance students' intercultural awareness and competence. In addition, The Spanish Writing Center prepares students to write with precision and detail on a variety of topics and provides those in the upper-division courses with useful resources to hone their writing abilities in Spanish.

Majors interested in pursuing independent studies should prepare a preliminary proposal addressing the subject to be explored and speak with the faculty member whose line of research best aligns with the proposed topic.

A minor in Spanish consists of six courses beyond SPA 201. The required courses are SPA 202, 221, 222 and 321; one 300-400-level course; and one 400-level Research Seminar course. All courses for the minor must be in Spanish.

Majors and minors can also fulfill some requirements during their study abroad experience. The department strongly encourages students to spend a semester or year in a Spanish-speaking country, and approximately 80% of our students do so. Students are advised to have completed SPA 321 before they study abroad. A maximum of three courses will be available for transfer upon approval from the department. Spanish majors and minors regularly study in the following programs: IFSA-Butler Buenos Aires/Mendoza; IES Abroad Language & Areas Studies in Madrid; CIEE Liberal Arts program in Sevilla; SIT program in Chile (Cultural Identity, Social Justice and Community Development program). We also offer our own programs during alternate summers. See the International Programs section of the Catalog for further information.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

101. Beginning Spanish I.
SPA 101 follows a proficiency-oriented, task-based approach to develop skills in reading, listening, speaking and writing, which prepares students to express themselves meaningfully in Spanish in simple situations ranging from describing themselves and others to talking about familiar topics in the present. The course introduces students to basic grammatical concepts and vocabulary, as well as the cultures of the Spanish-speaking world. Spanish is the primary language of instruction and class time is used for interactive practice. Offered every Fall. *Liu*

102. Beginning Spanish II.
Following a communicative approach, SPA 102 builds on the reading, listening, speaking and writing skills developed in SPA 101.The course prepares students to express themselves meaningfully in Spanish and engage in situations ranging from giving instructions to talking about the past. The course expands on the grammatical concepts and vocabulary studied in SPA 101 while deepening students' understanding of Spanish-speaking cultures. Spanish is the primary language of instruction and class time is used for interactive practice in meaningful contexts. Prerequisite: SPA 101 or equivalent. *Aldea-Agudo, Anderson, Liu, Stachura*

201. Intermediate Spanish I. (LS)
Following a communicative approach, SPA 201 builds on the reading, listening, writing and speaking skills developed in SPA 101 and 102. This course prepares students to express themselves meaningfully in increasingly complex situations, ranging from giving detailed opinions to hypothesizing about the future. The course expands on the grammatical concepts and vocabulary studied in SPA 101 and 102 and fosters critical thinking in a variety of cultural contexts. Spanish is the primary language of instruction and class time is used for interactive practice in meaningful contexts. Prerequisite: SPA 102 or placement.
Armstrong, Anderson, Caamaño, Cox

202. Intermediate Spanish II. (H)
Following a communicative approach, SPA 202 builds on the skills developed in the SPA 101-201 sequence with an emphasis on oral and written expression. Class discussions go beyond familiar themes to place greater emphasis on cultural topics and current events. The course reviews and practices key grammatical concepts preparing students to support a personal opinion, debate ideas with others and develop hypotheses. Spanish is the primary language of instruction and class time is used for interactive practice in meaningful contexts. Prerequisite: SPA 201 or placement. *Cox, Armstrong*

221. Grammar, Conversation and Composition. (H)
Oral practice directed toward greater fluency in the spoken language. Discussion and reports of current events and literary selections. Emphasis is placed on achieving fluency in the spoken language, with secondary emphasis on reading and writing. Prerequisite: SPA 202 or placement.
Anderson, Ruiz-Alfaro, Stachura

222. Advanced Conversation and Composition. (H)
A continuation of SPA 221. Practice directed toward greater fluency in the written language. Oral discussion and written reports on current events and contemporary cultural and literary topics. Emphasis is placed on developing students' ability to read and write in Spanish, with a secondary emphasis on aural and oral skills. Prerequisite: SPA 202 or placement.
Anderson, Stachura

291. Directed Reading.
Tutorial for students having completed SPA 221. Students who have a special interest may arrange a tutorial with a faculty member. Enrollment is conditional on instructor's permission.

301. Spanish Grammar. (H)
An in-depth study of the more subtle nuances of Spanish grammar including narration in the past and the subjunctive with a strong emphasis on oral and written practice. The course includes readings about the grammatical system. Prerequisite: SPA 221 or SPA 222

305. Business Spanish. (H)
This course aims at preparing students to conduct commercial operations in today's Spanish-speaking world and the Hispanic/Latinx community in the U.S. Students will learn about key business topics and terminology and engage in situational practices commonly used in the Spanish-speaking countries. They will also examine critically case studies and discuss the cultural forces (historical setting, social values, gender relations, among others) that model the business practices of the target population. Spanish is the primary language of instruction. Pre-requisites: SPA 221 and SPA 222 or permission by professor. *Same as BOS 305*. *Liu*

321. Miradas Críticas. (H)
First course dedicated to reading and interpreting literature. Introduction to the fundamentals of literature and aesthetic appreciation through careful reading, analysis and class discussion of Spanish-language texts from both sides of the Atlantic. Prerequisite: SPA 221 and 222 or permission.
Caamaño-Alegre, Ruiz-Alfaro

335. Cuentos y Cuentistas de América Latina. (H)
Cuentos y cuentistas de América Latina is an exploration of the Latin American short story in the twentieth century. This survey course focuses on the most relevant authors, literary-cultural themes, and theoretical approaches of the short story. The overall goals for the students in this course are the understanding of the short story as a unique literary genre and an appreciation of the diversity of themes and authors who are considered renown "cuentistas" of the continent. This course fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Ruiz-Alfaro*

343. Cuentos del Río de La Plata. (H)
Argentina and Uruguay are the two countries that have produced the most renowned short story writers in Spanish. It could be said that Jorge Luis Borges and Julio Cortázar constitute the paradigm of the Hispanic short story of the second half of the 20th century and later years. Both writers have set the grounds for the development of the short story as a genre in Latin America. In this course we will explore the influence of Borges and Cortázar in later Argentine and Uruguayan writers. This course fulfills the Latin American course requirement for Spanish majors.Prerequisite: SPA 321. *Tisnado*

345. Fantasía y Realidad en América Latina. (H)
This course explores the literary production and poetics of two emblematic authors of 20th Century Latin American literature, both Nobel Prize recipients: the Colombian Gabriel García Márquez (1927-2014) and the Peruvian Mario Vargas Llosa (1936). Students will learn about the unique literary, journalistic, and political visions of these authors through a selection of their works. Additional critical readings will provide students with a broad range of perspectives of how these two intellectual figures conceptualized social, historical, and political aspects of 20th century Latin America. This

course fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Ruiz-Alfaro*

350. Español en los Estados Unidos. (H)
Is Spanish the same as or different from other immigrant languages in the United States today? What is Spanglish and why is everyone so worked up about it? How does language relate to identity? We will consider these questions and others through sociocultural and linguistic analysis of the Spanish language in the United States. This course includes a community-based learning (CBL) component. All students will complete weekly activities to explore how concepts from class manifest in Spanish-speaking communities. Prerequisite: SPA 222 and instructor permission. *Cox*

370–379, 470–479. Topics in Spanish Literature, Language or Culture.
Seminar for in-depth study of an author, theme or period. Topic chosen to be announced each semester.

390. Independent Study.
Independent study directed by the Spanish staff. Prerequisite: Permission of department chairperson.

391. Directed Reading.
Tutorial for students having completed SPA 261. Students who have a special interest may arrange a tutorial with a faculty member. Enrollment is conditional on instructor's permission.

401. Spanish Tutorial. (H)
Extensive reading in areas of special interest and importance to the student. Regular conferences with tutor; critical papers. Prerequisite: Permission of department chairperson.

410. Research Seminar: El Boom Latinoamericano (The Latin American Boom). (H)
The Latin American Boom is a phenomenon in the history of literary movements in the 20th Century. In this course we will read some of the canonical pieces by authors that constitute the "boom." In so doing, we will examine the characteristics of the Latin American literary boom. We will read Alejo Carpentier, Carlos Fuentes, Gabriel Garcia Márquez and Mario Varas Llosa, as the four biggest representatives of this movement. This course fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Tisnado*

412. Research Seminar: El Exilio Hispanoamericano (Spanish American Exile). (H)
There is a vast number of Latin Americans living mainly in several European countries, Canada, the United States, Australia and some Asian and African countries. Political turmoil of the Southern cone in the 1970s and 80s and in Central America in the 1980s and 90s, however, created generations of exiles that were political prisoners or even desaparecidos, or whose close relatives disappeared or were killed. Some of these exiles are writers who conveyed their experience in their works. In this course we will read poems, short stories, and novels written by these exiles as well as works by authors who have chosen to live abroad for other reasons. We will examine how the experience of exile shapes and is reflected in their works. Fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Tisnado*

413. Research Seminar: Mujer, Nación y Amor (Woman, Nation, and Love). (H)
Through the analysis of novels and short stories written by Latin American female authors from different countries we will examine the construction of the concept of "Nation" in Latin America and the alternative that the female perspective offers to this construction. We will explore how gender roles have determined the idea of Nation. As part of the analysis, we will study historical and social aspects of the different countries to which the novels refer. Fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Same as WGS 413*. *Tisnado*

414. Research Seminar: El Detective Hispano (The Hispanic Detective). (H)
Why is detective fiction so popular? What makes so many readers or TV/film viewers want to read or watch murder or detective stories? What does the detective genre represent? How do we understand the surprise endings of detective stories? What variations have appeared (especially in Latin America) since the classic detective novel emerged? How can we understand these variations? In this seminar we will attempt to answer these questions through the analysis of detective fiction from Latin America. We will study detective novels in their specific Latin American context. Fulfills the Latin American course requirement. Prerequisite: SPA 321. *Tisnado*

415. Research Seminar: La Novela del Dictador Hispanoamericano. (Novel of the Hispanic Dictator). (H)
"La novela del dictador" is a Latin American subgenre that examines the concept of caudillismo within the Latin American countries. In this course we will explore how power and patriarchy have shaped the male dictator as a common governing figure in Latin America. We will start reading Guatemalan Miguel Angel Asturias' El Señor Presidente—the first recognized novela del dictador—and explore other versions of the genre. Fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Tisnado*

422. Research Seminar: Escritoras Españolas. (Spanish Women Writers). (H)
Through the analysis of literary works by some of the most representative female writers, this course aims at a deep understanding of the role of women in Spanish society, and, particularly, of the struggle of those among them who decided to express themselves through writing. Fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Same as WGS 422*. *Caamaño Alegre*

425. Research Seminar: Mujeres nuevas, viejas ideas: la construcción de la feminidad en la II República española y la dictadura franquista (New Women, Old Ideas: The Construction of Femininity in the Spanish II Republic and the Francoist Dictatorship). (H)
This course analyzes the existing contradictions in the construction of femininity during the Spanish Second Republic and the Francoist dictatorship through a variety of texts, genres, and women authors. It pays special attention to education, children's literature, and the figure of the female teacher, due to their relevance in gender construction. Fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Same as WGS 425*. *Caamaño Alegre*

431. Research Seminar: Teatro del Siglo de Oro (Golden Age Theatre). (H)
This course looks at the significance of Golden Age Theater in Spain through an analysis of its different genres and some of its central themes. The works of major Spanish playwrights, such as Lope de Vega, Tirso de Molina, and Calderón de la Barca, will be studied from a historical, ideological, social, and literary perspective. We will also explore the main characteristics of the Early Modern period in Spain, taking into consideration socio-political, economic, religious, philosophical and aesthetic aspects of the culture as a context for and as reflected in the theater. This course fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Ryjik*

435. Research Seminar: Don Quijote (Don Quixote). (H)
The main objective of this course is to explore the complex artistic universe that Miguel de Cervantes created when he wrote Don Quixote and to learn about the author, the social commentary, and historical context, which serve as backdrops and inspirational sources for this novel. The course aims to increase students' appreciation of literary history and acquire objective knowledge about Golden Age Spain. This course fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Ryjik*

442. Research Seminar: España contra España (Spain vs. Spain). (H)
This course analyzes the growing fracture between conservative and liberal Spain by examining 19th century prose from a variety of renown authors, such as Jose Mariano de Larra, Benito Perez Galdos, or Emilia Pardo Bazan, as well as literary movements, including Costumbrismo, Romanticism, and Realism. Prerequisite: SPA321. *Caamaño Alegre*

445. Research Seminar: Latinoamérica en escena (Latin America on Stage). (H)
Latin America on Stage is an exploration of Latin American drama of the twentieth century, and an introduction to the experimental and newer trends in the genre. This survey course focuses on the most relevant schools, sociopolitical themes, and aesthetic practices of Latin American theater. The overall goals for the students in this course are the appreciation

of the diversity of contemporary drama in the continent, as well as the development of critical skills and of oral and written modes of performance in the Spanish language. This course fulfills the Latin American course requirement for Spanish majors. Prerequisite: SPA 321. *Ruiz-Alfaro*

446. Research Seminar: Queering Latinoamerica. (H)
This research seminar explores literary and filmic representations of sexuality and gender identities in 20th and 21st century Latin America, and examines the complex ways used by several artists and authors to challenge and question traditional concepts of masculinity and femininity in the continent. Students will create an artistic work that relates with the course materials. A final research paper and a formal oral presentation are expected from all students at the end of the semester. Prerequisite: SPA321. *Same as WGS446*. *Ruiz-Alfaro*

450. Research Seminar: Musulmanes, judíos y cristianos en la España medieval. (H)
A thousand years ago, Spain was the sight of an extraordinary multicultural civilization. Muslims, Christians and Jews lived side by side and each contributed to the flowering of literature, art, science, and intellectual life. The convivencia or coexistence period lasted for several centuries and came to form the basis of modern Spanish identity. However, this reality has been obscured by the myth of an eternal, Catholic Spain that came to serve as the country's "official" history. This Research Seminar explores the nature and contradictions of this period. This course fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. Ryjik

485. Research Seminar: La invención de Cuba (The Invention of Cuba). (H)
Exploring the island's complex encounters with Spain, Africa, the Soviet Union and the United States, this course takes an interdisciplinary approach to the study of Cuban culture, incorporating materials as diverse as Columbus's diaries, Afro-Cuban fables, Castro's speeches and contemporary Cuban cinema. As we examine the historical, ethnographic, political and literary texts that narrate the "invention" of Cuba, we will focus on the tension between the internal fabric of "Cubanness" and the external forces shaping Cuba's national process. This course fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321.

486. Research Seminar: Erotismo y modernidad (Eroticism and Modernity).
This course explores cultural modernity in Latin America at the turn of the 20th century, focusing on the representation of masculinity, femininity and sexuality in literature in order to better understand the transforming social, cultural and aesthetic values of the period. This course fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Same as WGS 486*.

490. Independent Study.
A major research project to be carried out under the supervision of a member of the department.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022–2023

SPA 371. Mi Voz en Español

THEATRE AND DANCE

Professor Rachel Anderson-Rabern, Chair

Brian T. Silberman	*Professor of Theatre*
Rachel Anderson-Rabern	*Associate Professor of Theatre*
Jennifer L. Conley	*Associate Professor of Dance*
Pamela Vail (on leave 2022-23)	*Associate Professor of Dance*
Elba Hevia y Vaca (Fall 2022 only)	*Senior Adjunct Instructor of Dance*
Virginia West '78, P'12 (on leave Fall 2022)	*Resident Costume Designer and Senior Teaching Professor of Theatre and Dance*
Robert Marenick	*Resident Technical Director*

The studies offered by the Department of Theatre and Dance (TND) include acting, design, and writing for performance; dramatic literature, history, and criticism; and dance studies and performance. Courses in theatre making, dramatic literature, and dance meet distribution requirements either for Arts, Humanities, Non-Western, or World Perspectives.

THEATRE

The study of theatre at Franklin & Marshall College embraces all aspects of dramatic art as part of a liberal arts education. Interdisciplinary by nature, theatre studies allow all students to develop aesthetic responses and abilities in understanding and making dramatic works of art. The collective aesthetic and intellectual activities that make up the work of theatre, including reading, writing, discussing, creating and performing, help students develop skills necessary for useful, collaborative, and productive participation in society.

The theatre program at F&M integrates theory and practice as students develop historical knowledge, creative and critical thinking skills and combine them with current practices in performance, playwriting, dramatic writing, design, and studies in drama.

Introductory courses, as well as departmental productions, are open to all College students, including those without previous theatre experience.

A major in Theatre consists of a minimum of 10 credits (9.5 if Production Studio is taken in the first semester of the first year, see below) and the successful completion of at least two crew assignments.

TND 110. Global Theatre Perspectives.

TND/TDF 186. Acting I.

Alternatively, TND 186 may be substituted with a second Design course (TND 225, 228, 229)

TND 225. Costume Design or TND 228. Live Experience Design or TND 229. Applied Technologies of Theatre.

TND 251. Modern and Contemporary American Drama.

TND 283. Playwriting I.

TND 385. Production Studio (two at 1 credit each, or one at 1 credit and one at .5 credit. This option is available only if one of the Production Studios is taken in the first semester of the first year).

TND 495. Community Impact/Outreach.

Two crew assignments.

Two electives (Acting II, Playwriting II, Directing, Women in Theatre, Theatre in the Digital Age, Acting Rebellions, Stagecraft, or additional Design courses above the requirement, any Dance class).

To be considered for honors in theatre, graduating seniors must meet the College's general requirements for honors, with a project approved by at least two members of the theatre faculty.

Theatre majors have studied abroad in the following programs in recent years: British American Drama Academy; London Dramatic Academy; University of London, Royal Holloway College, London; SIT, Prague, Czech Republic; IES, Milan and London; Laban, London, Bilkent Exchange in Ankara, Turkey; Interstudy University of Cape Town, South Africa; University of Glasgow, Scotland; ASE Bath, England; Queen Mary College at Univer- sity of London, and National Theatre Institute at the O'Neill Theatre Center, Connecticut. See the International Programs section of the Catalog for further information.

A joint major in Theatre and another field may be developed in consultation with the Theatre faculty and a faculty advisor from the other field. Joint majors must complete one crew assignment.

A minor in Theatre consists of any six Theatre courses (including courses cross-listed from other departments) and one crew assignment.

DANCE

The dance major prepares dancers to move, create, analyze, write about and evaluate dance as an expression of the individual, of culture and of history. Students practice moving as a way of knowing, and through a range of courses experience dance as a mechanism for social change, for empowerment, for art-making, and for community-building.

A major in Dance consists of at least 10.5 credits and 40 hours of technical crew work. Course requirements:

TND 320. Kinesiology for Dance.

TND 331. History of Western Theatre Dance.

TND 490. Independent Study.

One Theatre elective.

One full year of Dance Company (while regular participation in Dance Company is encouraged, no more than .5 credit, one full year, can count toward the Dance major).

Six additional course credits in Dance, as elected in consultation with the Dance program director.

A joint major in Dance and another field may be developed in consultation with the Dance program director and a faculty advisor from the other field. Joint majors must complete 30 hours of technical crew work.

A minor in Dance consists of six course credits in Dance, as approved by the Dance program director. Dance minors must complete 20 hours of technical crew work.

Students wishing to study off campus should consult with dance faculty members and the Office of International Studies. Students seeking admission to graduate school in dance should consult with faculty advisers about additional courses to further prepare them for that direction.

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

THEATRE MAJOR—REQUIRED COURSES

110. Global Theatre Perspectives. (A) (NW) (WP)
This course explores the concepts of theatre, performance, and storytelling as terms that are inextricable from contextualizing global cultures and histories. While reading and discussing classical and contemporary plays, students will grapple with "form," "place," "time," "language," and "translation" as artistic tools that express, reflect, and question cultural identity. In addition to reading and writing assignments, projects will orient students toward applying discussion topics (ethical, literary, historical, etc.) toward the real-world decision making necessary in theatre practice. *Anderson-Rabern*

186. Acting I. (A)
Introduction to basic theory and practice of acting with emphasis placed on the critical and creative theories and techniques to cultivate imagination, focus, embodied creativity, self-awareness, and script analysis. Acting projects include exercises, scenes, and monologues. Reading and writing assignments required. *Anderson-Rabern*

225. Costume Design. (A)
The process of designing a costume from analyzing the script through the finished product. Examines the history of Western costume and other designers' work. Projects will allow students to apply theory, technique and research in achieving their own designs. *West*

228. Live Experience Design. (A)
Live Experience Design is a rapidly growing, interdisciplinary field. From rock concerts and theatrical stage performances to curated healthcare and retail experiences and immersive art, experience designers use narratives and digital modeling built through multiple media-visual, aural, and tactile-to stimulate strong emotional reactions to brands, performers, stories, and environments, shifting and directing the ways we engage with the world around us. Projects will allow students to apply theory, technique and research in achieving their own designs. *Same as ART228.* *Staff*

229. Applied Technologies of Theatre. (A)
An introduction to the backstage technology of the world of theatre and dance including the areas of stage management and stage technologies, multimedia, sound, lighting, and scenic construction. *Staff*

251. Modern and Contemporary American Drama. (A)
A literary and theatrical examination of representative American Drama from the early twentieth century to the present, emphasizing developments since 1950. The focus of this study is on how and why Americans and American life have been depicted onstage as they have and the powerful effect this range of depictions has had on American identity and the American imagination. *Same as AMS/ENG 251.* *Silberman*

283. Playwriting I. (A)
Combining workshop, lecture, readings, class discussion, and writing exercises, this course explores the fundamentals of the art and craft of writing for the stage. Over the course of the semester students will continually investigate, analyze, and probe the nature and meaning of

"drama" and "theatricality," working out definitions of words/concepts such as character, spectacle, dialogue/diction, thought, sound, and plot/structure/action in both theory and practice. Students will complete the first draft of a one-act play. *Silberman*

385. Production Studio. (A)
Combines performance work in theatre with research and analysis relevant to the given production, including the work of actors, assistant directors, assistant designers and stage managers (1 credit per semester; may be repeated for credit). Prerequisite: permission of the instructor. *Staff*

495. Community Impact/Outreach. (A)
This course explores, through the integration of theory and practice, theatre as a catalyst for social change and provides a structure for making community connections. Coursework will consist of readings and performance viewings drawn from this genre. Students will work directly with specific community populations as a cohesive producing theatre outreach group, with students working for managers, producers, technicians, educators, and performers to create devised performance. *West*

COURSES IN ACTING AND DIRECTING

186. Acting I. (A)
See under "Required Courses."

287. Acting IIa: Shakespeare. (A)
Theory and practice of acting techniques focused on skills necessary to understand and perform Shakespeare's classical verse and action -based acting. Students will cultivate an understanding of their unique vocal and physical instrument. Audition techniques will be introduced. Prerequisite: TND/TDF 186: Acting I. *Staff*

288. Acting IIb: Realism. (A)
Theory and practice of Stanislavski-based realism as explored through script analysis and performance of selected scenes and monologues. Students will cultivate an understanding of their unique vocal and physical instrument. Audition techniques will be introduced.
Prerequisite: TND/TDF 186: Acting I. *Anderson-Rabern, Staff*

289. Acting IIc: Presentational. (A)
Theory and practice of acting techniques needed to perform non-realistic scripts or to present realistic scripts in a non-realistic style. Students will cultivate an understanding of their unique vocal and physical instrument. Special emphasis may be placed on Commedia dell'Arte, Le Coq, bourgeois farce, absurdist clowning, Brechtian styles, and others. Prerequisite: TND/TDF 186: Acting I. *Anderson-Rabern, Staff*

285. Acting IId: Special Topics. (A)
Rotating subjects, for example: Musical Theatre, Acting for the Camera, Mime and Mask Work, Stage Combat, Devised Performance or Character-based Improvisation. Prerequisite: TND/TDF 186: Acting I.
Anderson-Rabern, Staff

386. Directing. (A)
A theoretical and practical investigation of the responsibilities and techniques of the director in the theatre. Classroom exercises are supplemented by selected readings in the history and theory of directing. Prerequisite: One previously taken Theatre course.
Anderson-Rabern, Staff

ELECTIVES

121. Stagecraft. (A)
This course is designed and intended to impart to the student a basic understanding of the many different technical theatre processes. Combined, these processes are "STAGECRAFT." Course content will include reading assignments, lectures, demonstrations and hands-on training in the form of lab work utilizing the Theatre, Dance and Film fall productions as teaching and learning tools. *Staff*

383. Playwriting II. (A)
An upper level writing workshop, exploring advanced concepts and theories of writing for the stage. Students will complete the first draft of a full-length play. Prerequisite: Playwriting I or instructor permission.
Same as ENG 383. *Silberman*

387. Writing for Television. (A)
Combining workshop, lecture, class discussion, and in-class writing exercises, this course explores the fundamentals of the art and craft of writing for television. Over the length of the semester we will investigate the nature and meaning of "drama" and "visual narrative" as functioning on the small screen. We will do this in part through the examination of format, style, structure, and needs of the network/streaming sites for both a comedy (30 minute) and a drama (60 minute) series. We will also study the basics of scene building, conflict, character, and dialogue by writing a draft of both a "spec" script and an original pilot. Students will develop and complete an outline and first draft of a television pilot on their own and in collaborative groups. *Same as ENG/FLM 387.* *Silberman*

490. Independent Study. (A)
Independent study directed by the Theatre staff. Permission of program director. *Staff*

DANCE COURSES

116. Introduction to Modern Dance. (A)
The practice of modern dance technique, integrating movement experience with study of the philosophies and theories that have shaped the art and its practice. *Conley*

117. Introduction to Ballet. (A)
Basic technique and theory of ballet, including the anatomical laws governing ballet movement and investigation of the style and aesthetic of ballet technique. The course emphasizes the practice of dancing as well as that of writing, thinking and speaking clearly about ballet. *Vail*

200 – 201. Dance Company. (A)
Credit for work undertaken toward performance in at least two mainstage College productions in the course of one academic year. Students are cast in choreographies by audition. Rehearsal, Company class, and performance participation are mandatory. For TND 200, students receive no credit, but .5 credit is awarded with the completion of TND 201. Prerequisites: audition and permission of the instructor. *Conley, Vail*

218. Intermediate Modern Dance Technique and Composition. (A)
A continuation of modern dance technique study, with further development of flexibility, strength and efficiency in movement. Fundamentals of dance composition are also studied. Ways that dance can communicate meaning are explored through reading, writing and movement assignments. Prerequisite: TND/TDF 116 or permission of the instructor. *Vail*

219. Flamenco Dance I (A)
Technique, rhythms and history of Flamenco dance in a studio format.
Hevia y Vaca

223. Introduction to West African Dance. (A) (NW)
African dance is an emanation of the lives of the people in this culture. Students learn, practice, perform, discuss, and write about the historical and cultural tradition of West African dance, with a focus on the dances of Guinea. *Staff*

227. Intermediate Ballet. (A)
Continued study of ballet technique and theory. Class includes kinesiological applications as well as historical and compositional investigations. The course emphasizes not only the practice of dancing but also of writing, thinking and speaking critically and clearly about ballet. Prerequisite: TND/TDF 117 or permission of the instructor. *Vail*

240. Dance and World Cultures. (A) (NW) (WP)
A study of non-Western dance forms and the cultural influences that have shaped them. Topics will include but are not limited to dance as a form of oral tradition; dance as a part of religious ritual; and cultural perceptions of the body, beauty and gender as revealed through dance performance. Class formats include lecture, discussion and studio sessions. *Conley*

244. Sound and Movement. (A)
Study of the relationship between sound and movement as it pertains to making dance, as well as the collaborative partnership of composers and choreographers. Through lecture, discussion, movement exploration and composition, students examine a variety of roles that music plays in the dance world, develop perceptive listening skills and undertake basic rhythmic and harmonic training. *Conley*

260. Compositional Improvisation. (A)
The practice of improvisation not only as a tool for choreography, but also as an art and performance form in itself, offering insightful experiences and discoveries. Students learn how to be fully present, both in body and in mind, making conscious choices and composing in the moment. Reading, writing and movement assignments support in-class practice. While there are no prerequisites, dance experience is recommended *Vail*

317. Advanced Modern Dance, Technique and Performance. (A)
A continuation of modern dance technique study, with further development of flexibility, strength and efficiency in movement. Investigating individual dynamism and nuance in movement—aspects of performance—is an essential aspect of coursework. Strategies that enhance, deepen and develop this practice are explored through reading and writing assignments and studio work. Prerequisite: TND/TDF 218 or permission of the instructor. *Vail*

320. Kinesiology for Dance.
Study of the science of movement as it relates to dance, including basic anatomy and physiology, the physics involved in dancing and the mind-body connection responsible for producing and controlling movement. Lectures, discussions and movement focus on understanding how the body moves and on increasing movement efficiency to enhance performance and prevent injury. *Vail*

322. Re/constructing Dance. (A)
Can you ever step in the same river twice? This course focuses on the replication of dance through dance revival, restaging, reconstruction, and reimagining. Students will study various approaches and methods for reconstructing dances, while addressing ideas about preservation, authenticity, legacy, and ownership of this ephemeral art form. There will be hands-on opportunities to reconstruct a historic work. Prerequisite: Any Dance course (including Dance Company for .5 credit) or permission of the instructor. *Conley*

330. Choreography and the Creative Process. (A)
Investigation of choreographic approaches and complex questions of artistry, based on reading, writing, research, discussion, feedback, movement exploration, and performance. Consideration of creativity from various perspectives, and exploration of how we foster it for ourselves. Prerequisite: any Dance course (including Dance Company for .5 credit) or permission of the instructor. *Vail*

331. History of Western Theatre Dance. (A)
Survey of the forces that have shaped and influenced stage dancing in much of Western Europe and the Americas beginning with the fifteenth century and moving into the contemporary periods. Class formats include lecture, discussions and studio sessions. *Conley*

345. Movement and Media. (A)
This course will investigate how the moving body interacts with media (film, video, technology), and explore the potential of those partnerships. In addition to reading and writing assignments, coursework will entail analysis of existing works and creation of original works. Students will collaborate in all aspects of the creative process, which includes directing, choreography, filming, and editing. It is recommended that students have taken FLM/TDF 262 (Motion Picture Production I) and/or at least one Dance course, or that students have some kind of dance and/or film experience. *Same as FLM345*. *Vail*

490. Independent Study. (A)
Independent project usually undertaken in the senior year by majors as a culminating capstone experience, advised by Dance faculty. Permission of Dance program director.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

Plague and Public Rage in Shakespeare. (Fall 2022)
Hip Hop: Movement and Culture. (Spring 2023)

WOMEN'S, GENDER AND SEXUALITY STUDIES

Professor Jaime E. Blair, Chair

MEMBERS OF THE WOMEN'S, GENDER AND SEXUALITY STUDIES PROGRAM COMMITTEE

Meredith Bashaw	*Professor of Psychology*
Jaime E. Blair	*Professor of Biology*
Dennis Deslippe	*Professor of American Studies and Women's, Gender and Sexuality Studies*
Giovanna Faleschini Lerner	*Professor of Italian*
M. Alison Kibler *(on leave Fall 2022)*	*Professor of American Studies and Women's, Gender and Sexuality Studies*
Clara Moore	*Professor of Biology*
Rachel Anderson-Rabern	*Associate Professor of Theater*
Karen Leistra-Jones	*Associate Professor of Music*
Ashley Rondini	*Associate Professor of Sociology*
Elena Cuffari	*Assistant Professor of Psychology and Scientific and Philosophical Studies of the Mind*
Rachel Feldman	*Assistant Professor of Religious Studies and Judaic Studies*
Cristina Perez	*Assistant Professor of American Studies*
Elspeth Wilson	*Assistant Professor of Government*

Additional faculty not on the program committee also contribute to this program.

Women's, Gender and Sexuality Studies is an interdisciplinary program offering a major and a minor in which students study how social constructions of gender and sexuality shape both academic discourses and lived experiences. In their coursework and independent research, students learn to apply feminist theories, queer theory and other critical theories to reflect on gendered experiences within a variety of contexts: historical, economic and cross-cultural. The courses in the program help students to analyze critically the ways gendered perspectives inform fundamental concepts like race, class or ethnicity. The major and minor augment more traditional approaches to studying women and gender by having students engage current scholarly inquiry into sexuality and into the diversity of global perspectives on gender and sexuality.

A major in Women's, Gender and Sexuality Studies consists of 10 courses.

The following courses are required:

WGS 210 (Gender, Sexuality and Power)

WGS 415 (Senior Seminar)

One course that focuses on feminist theory. Please consult with the program chair about the updated list of courses fulfilling this requirement.

One course that focuses on sexuality within a women's and gender studies framework, chosen from the following group, or in consultation with the program chair

WGS 242 (Gender, Sexuality in Antiquity)

WGS 356 (European Sexualities) or WGS 345 (Sociology of Sexuality)

One non-western course in WGS, which emphasizes non-Western cultures and societies, including indigenous, colonial and post-colonial contexts or that offers a substantial cross-cultural or transnational framework.

Five courses in the major must be at or above the 300 level.

A joint major in Women's, Gender and Sexuality Studies consists of eight courses: WGS 210; WGS 415; one course focusing on feminist theory; four electives, including one course that focuses on sexuality within a women's and gender studies framework; and one non-western course in WGS, which emphasizes non-western cultures and societies. Three of the electives for the joint major must be at the 300 or 400 level

A minor in Women's, Gender and Sexuality Studies consists of six courses.

Three of these are mandatory:

WGS 210 (Gender, Sexuality and Power)

WGS 415 (Senior Seminar)

One course that focuses on feminist theory. Please consult with the program chair about the updated list of courses fulfilling this requirement.

The other three are electives.

Majors and minors in the Women's, Gender and Sexuality Studies Program have studied abroad in the following programs in recent years: Advanced Studies in England Program in Bath, England; DIS, in Copenhagen or Stockholm ("Prostitution and the Sex Trade Program" and "Gender, Equality and Sexuality in Scandinavia"); IFSA–Butler in Buenos Aires, Argentina ("Human Rights: Diversity, Minority and Gender Studies"); and SIT–Netherlands ("International Perspectives on Sexuality and Gender"). The program also encourages students to consider IFSA Argentina: Advanced Argentine Universities Program (Concentration in Diversity, Minority and Gender Studies), and BCA Study Abroad in St. Augustine, Trinidad and Tobago. See the International Programs section of the Catalog for further information

A list of regularly offered courses follows. Please note the key for the following abbreviations: (A) Arts; (H) Humanities; (S) Social Sciences; (N) Natural Sciences with Laboratory; (LS) Language Studies requirement; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (WP) World Perspectives requirement.

117. Women/Science. (NSP)
This course will introduce students to the role of women in science both as participants in the creation of scientific knowledge, and as the subjects of biological study of the female body. Topics will include sexual development, pregnancy, childbirth, and menopause, as well as education and professional achievement in the sciences. Students will examine the contributions of women scientists through the lens of feminism, with an emphasis on the barriers women have faced historically and those that remain today. *Same as NSP 117.* *Blair*

119. Biology and Social Constructs. (NSP)
This course will introduce students to the fundamental biological processes of inheritance and sex determination in living organisms and examine the interplay of these concepts in our (mis)understanding of two social constructs commonly attributed to a biological basis: gender and race. Topics will include diversity of sexual mating systems, mechanisms of sex determination, concepts of genetic transmission and ancestry, pedigree analysis and human population genetics. Students will critically evaluate studies that apply and extend these concepts and their intersection with social constructs. *Same as NSP 119.* *Mena-Ali*

185. Impact of Reproductive Technology. (NSP)
This course will examine how reproductive technology has altered the way humans create and view family. Advances in medicine and manufacturing in the past century have produced unprecedented levels of control in preventing or producing offspring. What are the modern ways to make a baby? How have these options altered our views of family planning and parenting? What is the effect on the legal, social, and spiritual standing of the child (or potential child)? How does the impact of modern reproductive practices vary with different religions and cultures? *Same as NSP 185.* *Moore*

210. Gender, Sexuality and Power. (S)
Focusing on issues related to women's experiences in the contemporary United States and in other societies around the globe, this broad core course in women's, gender and sexuality studies explores basic concepts, methods of inquiry, empirical studies and symbolic interpretations from a feminist perspective. WGS 210 is required for the WGSS major or minor and Joint Majors. Students who are considering a WGSS major or minor or Joint Major are urged to take WGS 210 early in their college career. *Deslippe, Kibler*

212. Sex, Lies, and Shakespeare. (H)
Disguise & lies & sex, swearing & pairing, sins & twins, fear & a bear. Shakespeare brought all this to the London stage, and this course brings it to U. The basic course goals: to understand and appreciate the achievements of Shakespeare's written poetry and drama and to comprehend the interpretive role you play, and the interpretive role mixed-media play, in the thematics of sex and lying. Meets pre-1800 English major requirement. *Same as ENG 212* *Goeglein*

213. Black American Film. (A)
An introduction to film studies using black film as a genre of Hollywood and independent film. Covers the work of Oscar Michaux through the "blaxploitation" films of the 1970s and beyond. Explores films as social commentary in their particular historical contexts. Particular attention is given to screen analysis of segregation, sexuality, class differences and more. *Same as AFS/AMS/FLM 213.* *Willard*

231. Women Writers I. (H)
A study of the experiences of women as presented in selected British and American literature from the Middle Ages through the 19th century, as presented from a variety of cultural perspectives. We will consider various readings of the texts, including those that emphasize feminist theory and historical context. Among others, we will be reading Jane Austen, Aphra Behn, Anne Bradstreet, the Brontës, George Eliot and Mary Wollstonecraft. *Same as ENG 231.* *Hartman*

233. Women Writers II. (H)
A study of the changing world of American and British women in the 20th century as portrayed by women writers. The critical emphasis will be on feminist theory and the political, social and cultural background of the times. Among others, we will read works by Margaret Atwood, Toni Morrison, Sylvia Plath, Adrienne Rich, Anne Sexton, Edith Wharton and Virginia Woolf. *Same as ENG 233.* *Hartman*

239. Hip Hop: The Global Politics of Culture. (H) (NW) (WP)
This course will engage in hip hop's "politics of authenticity" while also offering a primer on the participation and contributions of a variety of transnational, sexual, gender, and racial/ethnic constituents. Rightfully centering and honoring the genre's Afro-diasporic influences, we will

examine debates involving transnationalism, gender, sexual, and racial boundaries in hip hop. We will also explore hip hop's global relevance, such as its sonic and cultural presence in reggaetón and its spread as a global dance form. Overall, this class will prompt students to untangle hip hop's seemingly contradictory ethos of "keeping it real" while simultaneously promoting broader ideals of cosmopolitanism and global commodification. *Same as AMS/AFS/MUS 239.* *Villegas*

242. Gender and Sexuality in Antiquity. (H)
The aim of this course is to explore the cultural constructions of gender and sexuality in the ancient societies of Greece and Rome. We will approach questions such as the status of women and the context of misogyny, the societal role of same-sex relations, the presentation and visualization of sexuality, desire and the body. We will examine archaeological, visual and literary evidence through assigned reading and class discussion. This interdisciplinary approach will allow us to gain an understanding of gender and sexuality in antiquity and will offer insights into the shaping of our own cultural and personal attitudes. *Same as CLS 242.* *Meyers*

244. Gender in the Economy. (S)
An analysis of the role gender has historically played and continues to play in the economy, both within and outside of the labor market. Topics include the historical conditions under which dominant gender ideals emerged, the value of unpaid work and national accounting, occupational segregation, labor market discrimination and feminist economic theory. Gender is considered as it interacts with other identities such as race and sexual orientation. Economic and interdisciplinary approaches are used. Prerequisite: ECO 100 and 103, or permission of the instructor. *Same as ECO 244.* *Nersisyan*

247. History of Fashionable Dress. (A)
A survey of the history of fashionable dress in Europe and America from the Renaissance to the present, examining men's and women's clothing in the context of artistic, historical, and cultural change in the modern period. This course will be divided into three units: Chronology; Object/Theory; and Interpretation. Students will select an interpretative context in which to situate their final project: cultural history, art history, or gender studies. Prerequisite: ART 103, ART 241, WGS 210, or permission of the instructor. *Same as ART 247.* *Rauser*

251. Gender and Religion. (H)
How do different religious traditions define and enforce gender identities and sexuality norms? In this course, students will read primary religious source texts as well as writings by historians, anthropologists, and feminist theologians. We will examine the ways that various religious traditions construct hetero-patriarchal dominance, gendering the human body through text and ritual. Using the insights of feminist theologians, we will read against the grain of scriptural sources, looking for subversive gender identities and feminine conceptions of divinity in order to ask: Can feminism and religion co-exist? *Same as RST 251.* *Feldman*

256. African American Literature I:
Declarations of Independence and the Narratives of Slavery (H)
This course covers African American narratives of slavery from the colonial period through the early 19th Century. The Declaration of Independence, the founding narrative of American selfhood and agency, provides the discursive background of the course. The Declaration did not mention Slavery, thereby erasing Slaves' experiences in the American narrative about peoplehood. We will engage the logic, rhetoric and contradictions of the document by pluralizing "declaration" to broaden and then examine how Slaves' oral narratives (the Spirituals, etc.) and texts (by Phyllis Wheatley, Oladuah Equaino, etc.) were figurative and literal declarations of independence that simultaneously question the Declaration's principles and ideology and affirm its transcendent meanings in the writers' discourses on Slavery, Black humanity and selfhood, race, the American Dream, etc. *Same as AFS/AMS/ENG 256.* *Bernard*

257. African American Literature II:
Meaning of the Veil and African American Identity. (H)
In *The Souls of Black Folk* (1903), the African American writer W. E. B. Du Bois introduces two concepts—the "veil" and "double-consciousness"—to explain the black experience in America. This course, which covers African American literature from Reconstruction to the Harlem Renaissance, the Black Aesthetic/Black Power movement and beyond, will examine the recurrence of the veil metaphor (and its synonyms) generally and engage Du Bois's formulation of the concept specifically in the cultural and historical contexts that frame this period's literature. We will explore how writers (Paul Laurence Dunbar, Langston Hughes, Zora Neale Hurston, Ralph Ellison, Toni Morrison, etc.) engage topics (race, gender, music, identity, etc.) that reinforce, expand and/or complicate Du Bois's metaphor. *Same as AFS/AMS/ENG 257.* *Bernard*

282. Women, Culture and Development. (NW) (S) (WP)
Role of gender in different cultures across the non-industrialized world and impact of economic development on the position of women and gender relations in these societies. Women's contribution to economic and social change and the extent to which conventional methods of analysis in development economics can be applied to their situations. Examination of the development of the "Third World woman" in the development literature. Prerequisite: ECO 100 and 103, or permission of the instructor. *Same as ECO 282.* *Zein-Elabdin*

310. American Masculinities. (S)
This course explores the importance of masculinity and its various constructions in American history and the contemporary period. We begin by examining the theoretical and historical foundations of American masculinities. We will focus on key ways in which men (and women) sustain and recreate masculinities. Topics include manhood and the workplace, politics, sports, courtship, fatherhood, military, immigration and ethnicity, crime and prisons and religion.
Same as AMS/HIS 310. *Deslippe*

320. American Women and Social Movements Since 1900. (S)
An interdisciplinary study of the various ways women have participated in American society and politics. Topics include the suffrage movement, modern modes of political participation and the New Deal and World War II. Critical analysis of the meaning of feminism and special attention to the post-1945 period. *Same as AMS/HIS 320.* *Deslippe*

345. Sociology of Sexuality. (S)
This course examines the idea that sex is not a natural act; instead, sex and human sexuality are socially constructed. We will examine how power—in a variety of forms—is at play in our social and cultural understandings and experiences of sex and sexuality. We will examine a variety of approaches to the study of sexuality as we consider sex, gender and sexual orientation, sexual relationships, the body, race/ethnicity, the commodification of sex, reproduction and contraception, and sexual violence. Prerequisite: SOC 100. *Same as SOC 345.* *Faulkner*

350. Sociology of Gender. (S)
This course introduces students to major theories and findings in sociology of gender, including the incorporation of global/transnational concerns. The course focuses on the constraints that the social construction of gender imposes on men, women, and LGBTQI/non-binary/gender non-conforming individuals, and helps students develop a critical analysis of gender as a social institution. It examines the intersections of gender with race, class, and sexuality, among other social locations, incorporating postcolonial/decolonial, queer, feminist, and science and technology theories. Prerequisite: SOC 100 or WGS 210. *Same as SOC 350.*
Shokooh Valle

352. Madonnas, Mothers, & Virgins: Medieval Religious Women. (H)
This course will examine a range of texts written about, for, and—especially—by women, and will attempt to unravel how gender and religion reflect and shape one another from the twelfth through the fifteenth centuries. We will look at early saints' lives and spiritual guides written for female audiences, letters written by women theologians, hagiographic romances, miracle plays, and narratives of female spiritual revelation. Meets pre-1800 requirement in the English major. (Pre-1800). *Same as ENG/LIT 352.* *Huber*

354. Gender and Race in Ethnic Studies Film.
"Gender and Race in Ethnic Studies Film" examines the concept of Ethnic Studies as an educational curriculum emerging from social movements. In an effort to understand Ethnic Studies, we will explore the media productions by and about people of color in relation to U.S. social unrests of the late-1960s, 1970s, and the aftermath of these decades. We will focus on three groups: U.S. Latinos, African Americans, and Asian Americans. *Same as AFS/AMS/FLM 354.* *Villegas*

356. European Sexualities. (S) (E)
Explores the transnational history of European sexualities from the 18th century through the present with special focus on the intersection of sexuality with politics and Foucauldian, performance, queer, and disability theories. Important themes, including gendered citizenship, dictatorship, democracy, dechristianization, and racialized sexualities, provide a framework within which specific topics such as female political activity, prostitution, homosexuality, bisexuality, pornography, the new woman, pronatalism, sexual revolution and fertility are examined*Same as HIS 356*. *Mitchell*

357. Hormones and Behavior with Lab. (N)
Like many other animals, humans must successfully navigate stressful situations, sex, and other social interactions to survive and reproduce. How do hormones enable, regulate, or modify behavior in these situations? How do behavior and the environment in turn affect hormone function? Do these effects differ across species? We'll develop an understanding of the endocrine system's organization and activation effects by examining, evaluating, and conducting research on humans and other animals. Prerequisites: PSY 100 or BIO 101/110; and PSY 300/230 or BIO 210 or SOC 302. *Same as BIO 357 and PSY 357. Previously PSY 303*. *Bashaw*

364. Sociology of the Family. (S)
Sociologists argue that the family occupies a contradictory location—as both a very private and public institution. In this course, we examine the family and its changing nature through a sociological lens. We focus on the diversity of family forms and family experiences, particularly across race-ethnicity, class, and gender lines. We consider family theories and historical variations in American family forms. We also analyze varieties in childbearing and childrearing experiences both in the U.S. and abroad. Prerequisite: SOC 100. *Same as SOC 364*. *Faulkner*

365. Queens, Goddesses and Archaeology. (S)
This course will consider how archaeologists examine gender and interpret the roles of women in ancient subsistence economies, politics and religions. To achieve this goal we will discuss the roles of women in egalitarian and stratified societies and explore the actions and status of both high-ranking and everyday women in the ancient world. Prerequisites: ANT 100, ANT 102, ANT 200 or permission of the instructor.
Same as ANT 365. *M. A. Levine*

366. Contemporary Queer Poetry & Poetics. (H)
What does Whitman mean by "manly love"? Does it matter if Nikky Finney identifies as queer if her syntax does so on her behalf? Is queer theory a poetics of sexuality? Or is poetics a queer theory of literature? This course will examine the current state of queer poetry and a variety of critical theories as they pertain to the contemporary literary landscape. We will read, discuss, research, interview, experiment alongside, and write about poems & poets published within the last century in an attempt to better understand how both queer and trans poetics have irreparably affected the direction of American poetry. Same as ENG 366. *Staff*

367. Women and Gender in Italian Literature. (H)
This course focuses on Italian women writers from the nineteenth century to the present. Authors may include Aleramo, Banti, Morante, Ginzburg, Maraini, and Ferrante, among others. Literary analyses of the texts will be placed in the context of Italian cultural history, the history of Italian feminism and post-feminism, and the tradition of Italian feminist philosophy, allowing for a deeper understanding of the ever-changing role of gender roles and dynamics in modern Italy. Taught in Italian. Prerequisite: ITA 310 or permission of the instructor. *Same as ITA 367*. *Faleschini Lerner*

383. Sex, Lies and Book Burning:
Life and Work of Wilhelm Reich. (S)
Upper level seminar: A survey of the life and work of famous psychoanalyst, controversial laboratory scientist Wilhelm Reich. The course reviews a wide range of Reich's writings from psychology, political science, to biology and physics (95% primary source readings). We also survey the historical context of Austria and Germany 1918–1939 and the U.S. 1939–1957. Finally we look in depth at Reich's clash with the U.S. government over whether scientific work can be judged in a court of law and the government-ordered burning of his books in 1956 and 1960.
Same as HIS/STS 383. *Strick*

385. Gender at Work. (S)
What is women's work? How has it changed over the course of American history? How is it valued? This course explores the world of women's work by comparing it to "men's" work. We will focus on wage earning, caregiving, sex work, housework, "double days" and "glass ceilings." We will especially consider women's strategies of survival and resistance from various demographic, racial, and ethnic groups. *Same as AMS/BOS 385*. *Deslippe*

407. Selected Studies in Latin American History. (NW) (S)
Readings and research in problems in the political, economic, social, and cultural history of Latin America. Seminar topics include "Sex and Sexuality in Latin America." *Same as HIS 407*. *Shelton*

413. Research Seminar: Mujer, Nación y Amor (Woman, Nation, and Love). (H)
Through the analysis of novels and short stories written by Latin American female authors from different countries we will examine the construction of the concept of "Nation" in Latin America and the alternative that the female perspective offers to this construction. We will explore how gender roles have determined the idea of Nation. As part of the analysis, we will study historical and social aspects of the different countries to which the novels refer. This course fulfills the Latin American literature requirement for the Spanish major. Prerequisite: SPA 321. Taught in Spanish. *Same as SPA 413*. *Tisnado*

415. Women's, Gender and Sexuality Studies Senior Seminar.
This capstone seminar is a culmination of students' work in WGSS. Students in the course will delve into contemporary debates in WGSS, connect feminist theory to recent controversies, and complete a significant independent research project related to particular course themes.
Kibler, Deslippe

422. Escritoras Españolas (Spanish Women Writers). (H)
Through the analysis of literary works by some of the most representative female writers, this course aims at a deep understanding of the role of women in Spanish society, and, particularly, of the struggle of those among them who decided to express themselves through writing. Fulfills the Peninsular course requirement for Spanish majors. Prerequisite: SPA 321. *Same as SPA 422*. *Caamaño Alegre*

425. Mujeres nuevas, viejas ideas: la construcción de la feminidad en la II República española y la dictadura franquista. (H)
This course analyzes the existing contradictions in the construction of femininity during the Spanish Second Republic and the Francoist dictatorship through a variety of texts, genres, and women authors. It pays special attention to education, children's literature, and the figure of the female teacher, due to their relevance in gender construction. Fulfills the Peninsular literature requirement. Prerequisite: SPA 321. Taught in Spanish. *Same as SPA 425*. *Caamaño Alegre*

446. Queering Latinoamerica. (H)
This research seminar explores literary and filmic representations of sexuality and gender identities in 20th and 21st century Latin America, and examines the complex ways used by several artists and authors to challenge and question traditional concepts of masculinity and femininity in the continent. Students will create an artistic work that relates with the course materials. A final research paper and a formal oral presentation are expected from all students at the end of the semester. Prerequisite: SPA321. *Same as SPA 446*. *Ruiz-Alfaro*

460. Race, Gender, and Class on Campus. (S)
On college and university campuses across the country, intersecting social identity politics have come to the fore over the course of recent decades. This course will examine the socio-historical forces and contemporary dynamics that inform, challenge, support, and disrupt the establishment and cultivation of inclusive campus communities. Drawing from sociological literature on higher education, social mobility, race, gender, socioeconomic class, and social policy, students will critically analyze the complex issues germane to how American institutions of higher education operationalize ideas of "diversity" and "inclusion" in the 21st century. *Same as AFS/SOC 460*. *Rondini*

462. Toni Morrison. (H)
This seminar will focus on Toni Morrison as a major African American and American writer. We will examine Morrison's oeuvre in both fiction and criticism, and explore how her aesthetics and vision, and her analyses of them, are informed by historical contexts and their racial, sexual, gendered, class, etc. impulses. Permission of the instructor required. *Same as AFS/ENG 462.* *Bernard*

467. Virginia Woolf. (H)
In her essay "Modern Fiction," Virginia Woolf wrote, "let us record the atoms as they fall upon the mind in the order in which they fall, let us trace the pattern, however disconnected and incoherent in appearance, which each sight or incident scores upon the consciousness." This proposition reflects Woolf's turn from realism to a modernist style devoted to interiority, impressionism, wordplay, and what she called "breaking the sentence and the sequence." At the same time, Woolf, an ardent feminist, wrote compellingly about the politics and culture of the early twentieth century. This course will consider Woolf's major works alongside excerpts from the letters and diaries, charting her formal innovations as well as her social critiques. Through an examination of literary criticism, we will explore the main tendencies in Woolf studies from the 1970s to the present day. *Same as ENG 467.* *Abravanel*

480. Issues Facing Organizations in the 21st Century. (S)
This course is a senior seminar for BOS majors. Various course sections use a different multi-disciplinary "theme." All sections require that students undertake a semester long project as the culmination of their academic program. Projects may be individual or group based. Contemporary issues are used to create discussion and debate. Permission to enroll is determined by the student's adviser and the instructor. *Same as BOS 480.* *Young*

486. Erotismo y modernidad
(Eroticism and Modernity).
This course explores cultural modernity in Latin America at the turn of the 20th century, focusing on the representation of masculinity, femininity and sexuality in literature in order to better understand the transforming social, cultural and aesthetic values of the period. This course fulfills the Latin American literature requirement for Spanish majors. Prerequisite: SPA 321. *Same as SPA 486.* *Staff*

490. Independent Study.
Permission of chairperson. *Staff*

TOPICS COURSES EXPECTED TO BE OFFERED IN 2022-2023

African-American History.
The Ancient Family.
Hormones and Behavior Seminar.
Narratives of Disability.
Sexual Fields.
Women in Music.
Race and Gender in Mediterranean Migrant Film.
Reproduction, Law and Policy in the U.S.
Global LGBTQ+ Human Rights.
Multi-Media Memoir: Race, Class, and Sex in Movies.

Educational Support Services

ACADEMIC ADVISING

Franklin & Marshall College emphasizes an approach to advising that takes seriously the College's mission to foster in its students a love of learning, to educate them about the natural, social and cultural worlds in which we live, and to encourage them to become citizens who contribute productively to their professions, communities and world. Academic advisers guide students as they learn to make decisions about intellectual interests, course selection, a Major and ultimately, the meaning of a liberal arts education.

Faculty members from across the curriculum advise incoming students. Faculty in the academic departments advise their majors as well as offer advice to all students about pursuing graduate study in their disciplines. The College views academic advising as a natural extension of the faculty's teaching role, and it is supplemented and supported by Dons and College House Deans, who work within the College House System. Health professions advising and legal professions advising are also available. More information about these special advising options can be found at *www.fandm.edu/academics/student-resources/academic-advising*.

ADDITIONAL EDUCATIONAL OPPORTUNITIES AND RESOURCES

The College has found many ways to recognize, encourage and reward special talents and to help students extend their academic interests into the realms of research, the arts, internships, educational travel, public service and employment. Some of the most prominent opportunities are described below.

STUDENT-FACULTY COLLABORATION

Summer Research Scholars Program
This summer research program, administered by the Office of the Provost and Dean of the Faculty, was established in 1984 by William M. and Lucille M. Hackman. Since that time, other funds have been made available for additional students to benefit from the Summer Research Scholar experience. This program brings students and faculty together to work on challenging, high-level research projects that range from astrophysics and chemistry to sociology and art. Awarded students receive stipends for 5, 8, or 10-week periods of full-time research to experience first-hand the excitement and challenge of collaborating with professors in advanced scholarly work. The program is open to all current first-years, sophomores, and juniors at Franklin & Marshall. Participants must be nominated by the faculty members with whom they wish to work. Typically, about 85 students and 50 faculty members participate each summer. Applications must be made by faculty sponsors to the Committee on Grants in early February.

Leser and Nissley Student/Faculty Partnership
The Leser and Nissley awards, established in 1993 by Walter and Martha Leser and J. Richard and Anna Ruth Nissley, support research conducted by students in true partnership with faculty members. Leser awards (in the natural sciences) and Nissley awards (in other disciplines) of up to $1,000 are awarded several times annually; both are administered by the Office of the Provost and Dean of the Faculty. Students must submit applications to the Committee on Grants during specified grant periods.

Independent Student Research Projects
These grants provide additional support for student research projects whose need exceeds the resources of the departmental budgets. Most successful applications are for advanced independent research or artistic projects (e.g. 390 or 490), but projects not related to course requirements or collaborative projects are also eligible for funds.

Preceptorships
A number of upperclass students are invited by faculty to serve as student preceptors in courses for first-year students. More details about these opportunities may be obtained from the Office of the Provost.

Production in the Arts
Each year, there are numerous productions in venues such as the Green Room Theatre, Barshinger Center for Performing Arts and the Roschel Performing Arts Center, sponsored by the Department of Theatre and Dance, the Department of Music and the Department of Art, Art History and Film. Students, including non-majors in these areas, have the opportunity to perform or to become involved in working behind the scenes to help produce these performances and exhibits.

Other Partnerships
Many other academic-year and summer research positions are available through departmental and faculty grants.

THE OFFICE OF STUDENT AND POST-GRADUATE DEVELOPMENT

As part of its mission to provide a world-class liberal arts education that prepares students for lives of meaning and success beyond college, Franklin & Marshall has transformed the traditional concept of "career services" by creating the Office of Student and Post- Graduate Development (OSPGD), which engages over 90% of the entire student body and thou sands of alumni yearly and prepares them for success in their lives and careers beyond college by:

- Recognize and articulate their unique strengths, challenges and experiences;
- Helping them explore and clarify potential career pathways;
- Exposing them to extraordinary opportunities;
- Preparing them to compete for the opportunities they seek; and
- Supporting their trajectories of success after graduation

THE WARE INSTITUTE FOR CIVIC ENGAGEMENT

The Ware Institute for Civic Engagement connects today's students with a variety of ways to get involved in the broader Lancaster community. We offer traditional community service projects, engaged learning opportunities through classroom collaborations, and more structured programs such as F&M Works and PSSI where F&M students can intern with local nonprofit organizations. The Ware Institute for Civic Engagement was founded in November 2000 through a generous gift from Trustee Paul W. Ware '72. Today, the Ware Institute challenges the civic imagination of Franklin & Marshall College students so as to instill in them a deeper desire to seek out opportunities to tackle community issues, contribute meaningfully to their communities and embrace their own potential to help shape the common good while both a student and post-graduation.

THE FLOYD INSTITUTE FOR PUBLIC POLICY

The mission of the Floyd Institute is to improve the quality of public policy through research, training, and constructive interactions between the academic and policy-making communities. The Floyd Institute is a gathering place for faculty, policy makers, students and the public to discuss policy issues via colloquia, conferences, lectures, workshops, and research. The Floyd Institute's mission is carried out through the work of the Center for Opinion Research and the Center for Politics and Public Affairs.

The Center for Opinion Research seeks to provide empirically sound research solutions and opportunities for academic and public policy researchers and the local community. The Center designs innovative and thoughtful research solutions to help its clients answer important questions and make strategic decisions. It also aims to produce and disseminate information that supports learning by students, researchers and the general public. The Center designs and conducts the Franklin & Marshall College Poll, the oldest Pennsylvania statewide poll exclusively directed and produced in the state.

The Center for Politics and Public Affairs fosters the study of politics and public policy. It seeks to stimulate discourse on political and policy issues. Its activities include fellowships and internships, public policy and political research, publishing research on policy and political topics and overseeing the Franklin & Marshall College Poll. The center also hosts political debates and policy fora by having political leaders and policy experts on campus to address and interact with members of the F&M community.

THE WRITING CENTER

The Writing Center provides assistance for students working on college writing assignments and oral presentations through one-on-one tutorials and, at the request of faculty, in-class writing workshops. The Center's trained staff of student writing assistants, mostly juniors and seniors, represents a wide range of majors and career interests. Students should prepare for a conference by bringing all available materials: any data being used, a rough plan or formal outline, a few sketched-out paragraphs, a complete paper, or even just the assignment itself. Writing assistants can help you at any stage of the writing process! Although assistants will not edit a paper, they can help writers recognize errors and make the necessary changes.

COOPERATIVE PROGRAMS OF STUDY

ENGINEERING

A liberal arts education from Franklin & Marshall College (F&M) provides students with exceptional problem-solving, critical thinking, and communication skills while they pursue coursework across the humanities, social sciences, and natural sciences. This broad acumen uniquely equips F&M students to excel in the engineering professions, which require multidisciplinary approaches to complex technological and humanistic problems. Recognizing the strong foundation that a liberal arts education provides for the engineering field, Columbia University's Fu Foundation School of Engineering and Applied Science, Washington University at St. Louis's McKelvey School of Engineering, Rensselaer Polytechnic Institute's School of Engineering, and Case Western Reserve University's Case School of Engineering have partnered with F&M on dual degree programs, which allow F&M students to receive both a Bachelor of Arts in their major of choice from F&M, as well as a Bachelor of Science from the engineering institution in a specific engineering discipline (e.g. Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering, etc.) via a 3+2 (three years at F&M and two at the partner institution) or 4+2 (four years at F&M and two at the partner institution) arrangement.

For those students who are interested in pursuing a Master's in Engineering, as well, Washington University's McKelvey School of Engineering also offers F&M students the option to earn both a bachelor's degree in engineering and a master's degree in engineering after spending one additional year on their campus. Students pursuing this "+3" option do not have any additional requirements to complete while at F&M, and they receive a scholarship from Washington University that discounts the cost of completing the "+3" option to be the same cost as completion of the traditional "+2" option.

For more information about F&M's dual degree programs in engineering or opportunities for graduate studies in engineering which many F&M students choose to pursue, please visit https://www.fandm.edu/ospgd/stem-professions/engineering-professions-advising or contact F&M's Director of STEM Professions Advising in the Office of Student and Post-Graduate Development at 717-358-4758 or mvitlip@fandm.edu. Interested students should meet with the Director of STEM Professions Advising as early in their time at F&M as practical in order to ensure they have time to complete all coursework required for their program of choice.

ENVIRONMENTAL SCIENCE MANAGEMENT AND POLICY

The College offers a cooperative program with Duke University in the areas of environmental science, management and policy. The student earns the bachelor's and master's degrees in five years, spending three years at Franklin & Marshall and two years in the Nicholas School of the Environment and Earth Sciences at Duke.

The Bachelor of Arts degree is awarded by Franklin & Marshall upon successful completion of one year of study at Duke, provided that 32 credits are earned. Duke awards the professional degree of Master of Forestry (M.F.) or Master of Environmental Management (M.E.M.) to qualified candidates at the end of the second year. The student must complete a total of 60 units at Duke.

The M.F. degree is in Forest Resource Management. Under the M.E.M. degree, students choose one area of study from a list of five Environment concentrations and another from a list of four Management concentrations. The Environment concentrations are: Ecosystems and Conservation; Ecotoxicology and Environmental Health; Energy; Marine and Coastal Systems; and Water Resource Management. The Management concentrations are: Business and Finance; Data Analytics; Environmental Economics and Policy; and Equity, Justice and Community Engagement.

Concurrent degrees may be earned alongside the M.F. or M.E.M. in Business (M.B.A.), Law (J.D.), Public Policy (M.P.P.), or Teaching (M.A.T.) through formal agreements between the Nicholas School of the Environment and Earth Sciences and other professional schools at Duke.

Alternatively, some students prefer to complete the requirements for the bachelor's degree at Franklin & Marshall before entering Duke. The requirements for these 4-2 students are essentially the same as those for students entering Duke after the junior year.

Interested students should consult the coordinator, Dr. Elizabeth De Santo, Associate Professor of Environmental Studies, early in their careers at Franklin & Marshall, about appropriate course scheduling, so that the necessary prerequisites for admission to Duke can be completed. Additional information about the Duke program is available at www.nicholas.duke.edu.

Academic Policies and Procedures

ACADEMIC HONESTY

Membership in the Franklin & Marshall community involves obligations of personal and academic integrity, and members of our community are bound by ideals of scholarly conduct and intellectual honesty. We expect our students to be honest and forthright in representing their work and its origins. Adherence to these norms is at the core of our academic mission and is necessary for the educational benefits we seek to convey. Conversely, violations undermine our shared purpose.

It is the responsibility of faculty members to explain the importance of academic integrity in their courses. This can include, but is not limited to, providing written expectations of these guidelines in the syllabus and explicit instructions for assignments, e.g., what level of collaboration is acceptable. It is the responsibility of the student to be aware of and abide by the standards set by the faculty member in each course. Ignorance of the standards is not an excuse and intent is not a factor in determining responsibility for misconduct.

The failure to meet these obligations of personal and academic integrity results in academic misconduct, which includes, but is not limited to, the following.

1. Unauthorized aid—making use of prohibited materials, study guides, or other assistance in an academic exercise, for example:
   a. accessing prohibited material during an examination,
   b. obtaining test questions before an exam is given,
   c. looking up solutions to homework problems online,
   d. obtaining the solution to a problem from a classmate, or
   e. collaborating on work that is assigned individually.
2. Plagiarism—reproducing the work or ideas of others and claiming them as your own, for example:
   a. claiming authorship of a piece of writing or artwork created by someone else,
   b. making use of ideas obtained from other sources (including classmates) without clearly acknowledging the source, or
   c. incorporating verbatim passages or elements from an existing work into one's own work without quotation marks or otherwise clear indication of authorship.
3. Falsifying information—making false statements or fabricating information in an academic exercise, for example:
   a. inventing data or sources for an assignment,
   b. lying to obtain an extension or other favorable consideration, or
   c. submitting work completed in another class for credit without the express permission of the instructor.
4. Unethical interference—interfering with or undermining the work of others to gain unfair advantage, for example:
   a. inappropriately limiting other students' access to

relevant materials,
   b. tampering with others students' submissions or grades,
   c. purposely undermining the success of collaborative work, or
   d. interfering with other students' scholarship by creating inhospitable work conditions.
5. Facilitating misconduct—helping others commit acts of academic misconduct, for example:
   a. completing another student's work,
   b. providing a solution or other prohibited material to another student, or
   c. lying to help another student gain advantage or conceal wrongdoing.

When a faculty member suspects that a student is responsible for academic misconduct, the faculty member will refer the case to the Office of Student Affairs for referral to the Committee on Student Conduct or administrative action. The student and the faculty member are entitled to a Committee hearing upon request by either party.

If the student is found to be responsible for academic misconduct, a disciplinary status ranging from a warning to expulsion will be assigned. The faculty member will decide upon a grading penalty up to a failing grade in the course. After receiving a sanction, the student may not elect the Pass/ No Pass option in that course without the permission of the Dean of Students. In the case of a student who has already chosen the Pass/No Pass option, the Registrar will rescind that option, unless the Dean of Students permits it to remain. If assigned an F in the course as a result of the academic misconduct, the student cannot withdraw from the course without the permission of the faculty member.

THE USE OF COPYRIGHTED MATERIALS

The College obeys, and expects its students to obey, Federal copyright laws. These laws generally prohibit the copying without permission of a copyrighted work. That work may be literary, musical, or dramatic; a picture, a sound or video recording, or a computer program or material; or any other original expression fixed in some tangible form. For guidelines governing copyrighted materials, consult the College's Copyright & Fair Use Policy web site at www.fandm.edu/college-policies/academic/copyright-fair-use-policy. Further questions may be addressed to the appropriate College offices, particularly the Library and Information Technology Services.

PATENT POLICY OF FRANKLIN & MARSHALL COLLEGE

The objective of the College patent policy is to facilitate the invention, transfer and application of new technology that promises to be of benefit to the general public and, at the same time, to protect the interests of the inventor and the College. It applies to all employees and students of Franklin & Marshall College.

A copy of this policy may be obtained by contacting the Office of the Provost or by viewing it at www.fandm.edu/college-policies/academic/intellectual-property-policy.

DISRUPTIONS OF THE ACADEMIC PROCESS

All students should be familiar with this policy statement on campus disruptions, adopted by the Faculty in May, 1969:

1. Franklin & Marshall College is fully committed to the principle that freedom of thought and expression must be assured for all members of the College community, including the freedom to express or demonstrate disagreement and dissent by reasonable and peaceful means.
2. This freedom is a sine qua non of a college. The commitment is hereby reaffirmed.
3. The spirit of this commitment is clear and it should, by common consent, be held inviolate.
4. But the determination of what is orderly and peaceful cannot be left only to those engaged in that action. The College retains the responsibility to state and enforce those determinations.
5. The process of free exploration, examination and evaluation of ideas can survive only in an atmosphere in which every member of the College is guaranteed the right to think, talk and move about freely. When any members of the College, unwittingly or by design, deprive others of these rights, the institution and its academic endeavors are placed in grave jeopardy.
6. Those who deny this freedom to others shall be subject to sanctions by the College and may, after due process, be considered unwelcome as members of the community.
7. The academic process cannot be conducted in an atmosphere tainted by disruption or by the threat of intimidation, coercion, or duress.
8. While the maintenance of the integrity of the academic process is an obligation of all members of the College, there is a clear responsibility imposed upon the faculty to safeguard that integrity and to certify standards of performance of all engaged in the academic life of the College.
9. The College's determinations on such matters are reached through reasoned thought and rational discourse. The College will not condone or tolerate unreasoned or injudicious violations of the spirit of the College or disruptions of the orderly academic process.
10. The College cannot recognize as valid conclusions reached under the imposition or threat of intimidation.
11. It is asserted, therefore, that activities which disrupt the normal academic processes of the College are not only inappropriate but intolerable. Individuals who initiate or engage in such activity shall be subject to appropriate disciplinary procedures or sanctions by the College. Such action shall, of course, provide for appropriate access to fair hearing and due process.

COMMUNICATION WITH STUDENTS

The College typically communicates with students by the following methods: mail to their home or local address, mail to their campus box, or e-mail to their Franklin & Marshall account. Students are expected to regularly monitor communications to these destinations.

THE COURSE CREDIT SYSTEM

Franklin & Marshall College uses a course credit system. Thirty-two course credits are required for graduation. A typical course is assigned one course credit, equivalent to four semester hours, though some courses may be assigned more or less than one course credit. Departments may offer half (0.5) credit courses and double (2.0) credit courses. The smallest unit of credit offered at Franklin & Marshall is one-half (0.50).

The typical one-credit course meets three times per week for 50 minutes, or twice a week for 80 minutes, or once per week for 170 minutes. Courses with laboratories add a three- or four-hour lab to these lecture hours, but they do not carry additional credit.

Semesters are 13 and 3/5 weeks of classes (vacation periods such as fall break, Thanksgiving break, and spring break excluded), followed by at least two reading days, and then five days in which final examinations are scheduled.

We recommend that a student should typically spend three hours of out-of-class time for every hour spent in class.

GRADUATION REQUIREMENTS

To be eligible for the Bachelor of Arts degree, a student must satisfy these requirements:

1. Complete the online Application to Graduate by the published deadline (in the Fall semester of the student's senior year);
2. Earn 32 course credits (at least 21 of them with standard grades)
   a. within a time period of
      (1) twelve (12) semesters of enrollment and
      (2) eight (8) calendar years from initial matriculation,
   b. with a cumulative grade point average of at least 2.00, and
   c. with standard grades in all Connections, major and minor courses;
3. Meet all Introduction and Exploration Phase requirements by:
   a. satisfying the Introduction phase of the curriculum through completion of the Connections requirement;
   b. satisfying the Exploration phase of the curriculum through completion of:
      (1) six course credits distributed as follows
         (i) one course credit in the Arts (A);
         (ii) one course credit in the Humanities (H);
         (iii) one course credit in the Social Sciences (S);
         (iv) two course credits in the Natural Sciences, either through passing two natural science with lab courses (N) or passing one natural science with lab course (N) and an additional course carrying the Natural Science in Perspective (NSP) designation;
         (v) for students entering the College in the Fall of 2021 and later, one course credit in World Perspectives (WP); for students who entered the College prior to the Fall of 2021, one course credit in Non-Western Cultures (NW); and
      (2) the Language Studies requirement by passing or placing out of the third semester of any foreign or classical language sequence (generally the 201 level);
4. Complete the Concentration Phase by passing an approved major field of study, with a minimum of a 2.00 grade point average in those courses considered by the major department to fulfill the major requirements;
5. Earn at least sixteen (16) course credits on the Franklin & Marshall campus; and
6. Enroll in at least three course credits during each of the last two semesters (usually the seventh and eighth semesters) in which the student completes degree requirements, with the final semester being in residence at Franklin & Marshall College.
   - Petitions for exceptions to either of these rules on educational grounds must be made to the Committee on Academic Status.
   - Students who have attended Franklin & Marshall College for eight full-time semesters and who expect to complete the graduation requirements elsewhere may petition the Committee on Academic Status to do so.

DEGREE AUDITS

A degree audit is an electronic review of each student's course transcript matched against the College's requirements for a degree. Students may review their degree audits through myDiplomat and become informed about their progress toward the degree at any given time. Faculty advisers also have access to the degree audits of their advisees. While the electronic degree audit is usually accurate, at times the complicated nature of a major or other requirement may lead to inaccuracies. Students are responsible for reporting audit discrepancies to the Registrar. In addition, a discrepancy in the degree audit does not change the actual requirements for graduation; in particular, unfulfilled requirements are not waived because of degree audit discrepancies. The responsibility for understanding and meeting degree requirements rests entirely with the student.

GRADUATION RATE

Franklin & Marshall College, in compliance with the 1990 Federal Student Right-to-Know and Campus Security Act, publishes the percentage of students who enter the College as new first-year students in the fall and then graduate in six years or less. The six-year graduation rate for the classes who entered as first-year students in the Fall of 2015 was 83%.

COLLEGE GRADUATION HONORS

College honors are awarded to graduating students on the basis of their final cumulative grade point average according to the following standards:

Summa Cum Laude	3.90	—	4.00
Magna Cum Laude	3.70	—	3.89
Cum Laude	3.50	—	3.69

GRANTING OF HONORS

Departmental or program honors are awarded to students who successfully meet the following requirements:

1. Complete an approved outstanding Independent Study project, which entails extensive independent research or creative effort and which culminates in a thesis, a work of art, a recital, or some other performance.
2. Submit the Independent Study project to a specially constituted review board and successfully defend the project in an oral examination of the project and of related work.
3. Complete a significant body of course work of high caliber in the department or program or in related departments or programs.
   The rule of thumb for a "significant body of course work" in the field or related fields is a minimum of four courses, in addition to the Independent Study project. If departments or programs wish to impose stricter guidelines or to waive this minimum, they should submit requests to the Provost and Dean of the Faculty, who may consult the Educational Policy Committee for advice in particular cases.

Departments may determine whether a "significant body of course work" is worthy of honors in either of two ways: first, they may determine a minimum grade point average for work in the department beneath which students may not be granted honors; or second, they may meet subsequently to the student's oral defense and vote to determine whether the "significant body of course work" is worthy of honors.

Students usually will major or minor in a particular department or program in order to receive honors in it, but need not, provided that they: meet the above requirements; are recommended by the review board to the department or program for honors on the basis of the quality of the project and its defense; and receive the recommendation of the department or program that the supporting course work in the field is of sufficiently high caliber to support the recommendation for honors. The "significant body of course work" of students with a Joint Major will be evaluated by the home department of the adviser of the Independent Study. For students with Special Studies majors, this evaluation will be conducted by the student's primary department (typically the one in which five courses or more are taken).

The following guidelines are to be observed in Independent Study projects considered for departmental or program honors:

1. As early as possible, the project adviser, in consultation with the advisee and department or program chairperson, should constitute a review board of at least three but no more than five persons, one of whom might well be from another department, program, or institution. Copies of the completed thesis or project should be sent to all members of the review board before the oral examination.
2. The adviser should establish procedures for the oral defense with the examiners, specifying, for example, whether the student will make a brief opening statement, how much time will be allotted to each examiner and in what manner, etc. The adviser is responsible for briefing the student on these procedures well in advance of the defense.
3. The defense should last at least one, but no more than two hours. Artistic performances will, of course, vary in length. The defense should be open to any interested observers, with the knowledge of the student, and its time and location should be published in advance of the meeting.
4. To allow the student and examiners maximum freedom, the adviser should not enter into the defense unless specifically asked to do so, and should not feel obligated to be present for all the deliberations of the review board.
5. After the oral examination, the review board members alone should, after discussion, vote by secret ballot on the thesis and its defense. They are asked to determine whether the thesis and its defense warrant a recommendation of "Honors" or "No Honors," as one part of the department's or program's evaluation of candidates for honors. The chairperson of the review board should notify the department or program chairperson in writing of the board's recommendation.
6. The recommendation to the Provost and Dean of the Faculty for departmental or program honors will consist of:
   a. The written recommendation to the department or program chairperson by the chairperson of the review board concerning "Honors" or "No Honors" on the basis of the project and its defense, and;
   b. The evaluation by the department or program chairperson concerning the caliber of a significant body of course work in the field.
   Both recommendations must be made at the "Honors" level for students to receive departmental or program honors.
7. The project adviser alone is responsible for assigning the final grade for the Independent Study project and for reporting that grade to the Registrar.

INTERDISCIPLINARY HONORS

A student who earns "Honors" on an interdisciplinary project may be granted "Interdisciplinary Honors" if each department meets separately and each grants "Honors" based on a significant body of work in its own discrete department. In that instance, the transcript will read "Interdisciplinary Honors: Dept 1/ Dept 2."

WITHHOLDING AND REVOCATION OF DEGREES

1. A student who is subject to a pending disciplinary case is not eligible to receive a degree or participate in graduation until that case is resolved.
2. The College reserves the right to withhold a degree and/or graduation participation if warranted by

circumstances such as the discovery of serious violation of the College's policy on Academic Honesty.

3. The College also reserves the right to revoke an already granted degree if circumstances such as the above warrant.
4. An eligible student with any unpaid College bills may participate in the graduation ceremony but will not receive a diploma. The College reserves the right not to release official transcripts until all bills are paid.

COMMENCEMENT

The annual Commencement ceremony is held at the end of each spring semester and recognizes students who received degrees the preceding summer and winter as well as those students receiving degrees on the day of the ceremony. Degrees are conferred three times each year: at the annual Commencement ceremony following the spring semester, at the end of August, and at the end of January. Students who receive degrees in August or January will receive their diplomas by mail and will be listed in the Commencement program the following spring. Students who receive degrees at the end of the spring term may receive their diplomas at the Commencement ceremony. Those who elect not to attend should notify the Registrar and indicate their preferred mailing address in writing in order to receive their diploma. Attendance at the ceremony is not required.

Seniors who are close to completion of graduation requirements by the end of the spring semester may apply with the Registrar's Office to participate in Commencement ceremony without receiving a diploma if they:

1. Have a 2.00 or higher major grade point average, a 2.00 or higher cumulative grade point average and the approval of their major department;
2. Are in overall good standing at the College (this includes disciplinary matters);
3. Are able to complete all graduation requirements by satisfactorily completing not more than two (2) additional course credits;
4. Submit a workable plan to complete all graduation requirements as soon as possible and no later than the August 31 following Commencement. In extraordinary circumstances, students may request an exception. If such a request is approved, students will not be permitted to participate in extra-curricular activities, including intercollegiate sports, subsequent to the Commencement in which they participate.

This policy is administered by the Associate Registrar. Exceptions to these requirements are rarely made. If a student feels that an extraordinary situation is present, he or she may present the case, in a written petition, to the Committee on Academic Status for special permission to participate. No further appeals are possible.

Qualified students may participate fully as seniors in all Commencement exercises. Their names will be listed in the Commencement program with a notation "degree requirements to be completed."

These students will receive their diplomas on the degree conferral date following completion of all requirements but will not be listed in future Commencement programs. For alumni programs purposes, such students will be considered members of the class of their choice. Additional information may be obtained from the Registrar's Office.

HONORS LIST AND DEAN'S LIST

A student whose grade point average for the preceding semester is 3.70 or better is placed on the Honors List. A student who attains an average of 3.25 or better is placed on the Dean's List. In both cases, to be eligible, the student must have satisfactorily completed three course credits in courses for which the standard grading option was utilized. (In addition, there may be no grade below "C-," where "NP" grades are considered to be below "C-.")

HONOR SOCIETIES AND SIMILAR RECOGNITION

Alpha Kappa Delta—sociology
Benjamin Rush—health professions
Black Pyramid—senior honorary society
Delta Phi Alpha—German
Eta Sigma Phi—classics
Gamma Kappa Alpha—Italian
John Marshall—pre-law
Mu Upsilon Sigma—instrumental music
Omicron Delta Epsilon—economics
Phi Alpha Theta—history
Phi Beta Kappa—scholarship
Pi Delta Phi—French
Pi Gamma Mu—social science
Pi Mu Epsilon—mathematics
Pi Sigma Alpha—political science
Psi Chi—psychology
Sigma Delta Pi—Spanish
Sigma Pi Sigma—physics

Phi Beta Kappa recognizes superior intellectual achievement in the pursuit of liberal education. Founded in 1776 at the College of William and Mary, Phi Beta Kappa is the premiere academic undergraduate honorary society. The Theta Chapter of Pennsylvania was established at Franklin & Marshall College in 1908.

Each year, resident members of the Chapter meet to review students' credentials and elect new members, predominantly seniors, plus a few highly exceptional juniors.

The Society seeks students with outstanding records and good character who have developed the qualities of mind that are the aim of a liberal, humane education and approach their studies with intellectual curiosity in pursuit of a comprehensive understanding of the natural and social worlds.

Evaluation of candidates is based on various indicators of the intellectual spirit, including but not limited to high grades, the opinions of professors and professional staff familiar with candidates' achievements, participation in upper-level classes, independent research, competency in areas such as quantitative analytical skills and foreign languages and sparing use of the Withdrawal and Pass/No Pass options. Students should normally have completed either coursework in three different disciplines in at least two divisions (a minimum of two courses, one of which must be beyond the introductory level) or a double major or major/minor in two different divisions. These guidelines will pertain to Special Studies and interdisciplinary majors as well.

Dana Scholars

The Dana Scholars program, made possible by the Charles A. Dana Foundation, recognizes about 70 continuing students of high academic achievement, outstanding character and leadership potential. Dana Scholars are nominated by the faculty.

ACADEMIC STANDARDS

Students who are making satisfactory progress toward the degree are allowed to continue their studies at Franklin & Marshall College. Satisfactory progress toward the degree is defined as meeting the following minimum class standing and academic performance standards:

A. ACADEMIC PROGRESS. Students are normally expected to complete four course credits each semester and to complete course work required for the Bachelor of Arts degree within eight semesters. A review is made at the end of each regular semester to determine the class standing of every student. For enrollment in the sophomore class, a student must have earned seven course credits; in the junior class, 15 course credits; in the senior class, 23 course credits; and for graduation, 32 course credits.

While unusual circumstances may prevent some students from proceeding on this schedule, the College is unwilling to extend the time indefinitely. Therefore, sophomore status must be attained in a maximum of three semesters; junior status in a maximum of six semesters; senior status in a maximum of nine semesters; and graduation within a maximum of 12 semesters. All requirements for graduation must be completed within a maximum of eight calendar years from initial matriculation. Students who fail to meet the minimum requirements of academic progress will be placed on academic suspension for a period of one semester. Students with unusual circumstances that prevent them from meeting these requirements may petition the Committee on Academic Status for an extension.

Students may view end of semester grades on their transcripts through myDiplomat.

B. ACADEMIC PERFORMANCE. Students must achieve the following minimum cumulative grade point averages as a function of the number of course credits earned:

Course Credits Earned at F&M	Minimum CGPA
First Semester	1.00
0 to 8	1.70
more than 8 to 16	1.90
more than 16	2.00

Students who do not achieve a semester grade point average of at least 2.00 will be placed on "semester advisory" status. Students who do not achieve a cumulative grade point average of at least 2.00 will be placed on "cumulative advisory" status. Students who do not achieve either a semester or cumulative grade point average of 2.00 will be placed on "semester and cumulative advisory" status. Students on "advisory" status will be informed of this in writing, and a College House Dean will meet with these students to discuss academic concerns. Students should consider these meetings to be mandatory.

ACADEMIC SUSPENSION

Students will be placed on Academic Suspension if:

They fail to meet the minimum cumulative grade point average for the appropriate credits earned (unless in the just completed semester they earned a semester grade point average of 2.40 or higher for at least three course credits);

They fail to meet the minimum requirements for class standing; OR

They fail all courses attempted in any one regular semester.

Suspended students may submit an appeal for a rescission of the suspension to the Committee on Academic Status.

First suspensions are for a period of one academic semester, and they include the summer period between the end of the semester at which they receive the suspension and their eligible date of return. Students receiving a suspension at the end of a fall semester are eligible to resume their studies at the beginning of the next fall semester. Students receiving a suspension at the end of a spring semester are eligible to resume their studies at the beginning of the next spring semester.

This period of suspension allows students time to reflect upon the sources of their academic difficulties and return to the College better prepared to meet the academic expectations of the faculty. Students placed on suspension should choose carefully the activities they pursue during the period of suspension because they will be expected to explain and justify those choices as part of the procedure for returning from a suspension. Additionally, students are expected to enroll in at least one course at another institution during the period of suspension. Successful completion of at least one course to prove demonstrated readiness is required to return to F&M[1].

Subsequent suspensions are for a period of two academic semesters, and include summer period(s) from the beginning of the suspension to the eligible date of return. Subsequent suspensions place in doubt a student's willingness and ability to meet the academic standards of the College. This longer period of time should be used to examine seriously whether the student should continue at the College. During a subsequent suspension, students are expected to enroll in at least one course at another institution during the period of suspension. Successful completion of at least one course to prove demonstrated readiness is required to return to F&M[1].

Approved Courses for Successful Completion

Students are encouraged to enroll in a course at an accredited institution to best re-engage in an academic setting and demonstrate readiness for the academic rigor of F&M. If an accredited course is not available or is not feasible, students may also enroll in a course through Coursera2 and provide the certificate of completion with their re-entry materials.

One course taken during the period of suspension may be applied as transfer credit to F&M. All current course transfer policies through the Office of the Registrar apply, and students must receive approval for the transfer credit prior to completing the course.

Process for Return
Students who wish to return from an academic suspension must write a letter to the Committee on Academic Status requesting permission to return. This letter must be submitted by May 1 for students wishing to return in the Fall, and by December 1 for students wishing to return in the Spring[3]. Prior to submission of this letter, students are expected to consult with their College House Dean.

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[1] Successful completion is achieved with a C or higher on the official transcript or certificate of completion from the course taken.

[2] To register for a Coursera course, please visit www.coursera.org. It is strongly recommended that a student enroll in a course through Coursera that best matches their academic interests or major of study.

[3] In cases where a student receives notice of academic suspension after the deadline to register for a course at another institution, students may be approved to return to F&M with the contingency that they show the successful completion of a course prior to their arrival to campus. For example, if a student receives notice of academic suspension in January, and is unable to register for and complete a course prior to the May 1st deadline for return, the student should submit all required materials to the Committee on Academic Status by the deadline, and provide information on the expected course for completion forthcoming. The Committee on Academic Status will then make a decision for return contingent upon successful completion.

COURSE REGISTRATION AND CREDIT

CLASS SCHEDULING

The master schedule of classes is made available online prior to registration each semester. Classes begin at 8:00 a.m. and end at 4:20 p.m. on Mondays, Wednesdays, and Fridays; they begin at 8:30 a.m. and end at 6:05 p.m. on Tuesdays and Thursdays. Additionally, there is an evening class period Monday through Thursday that begins at 7:30 p.m. The class schedule allows for a twice-weekly Common Hour. The Common Hour is scheduled from 11:30 a.m.–12:35 p.m. on Thursdays and is reserved for College community events. Tuesdays from 11:30 a.m.–12:35 p.m. is designated as a free hour and may be scheduled for meetings, multiple-section common examinations, etc.

In order to permit student participation in extracurricular activities, attendance at regularly scheduled classes or labs is not usually required after 4:20 p.m. on Mondays, Wednesdays and Fridays or after 6:05 p.m. on Tuesdays and Thursdays, except for regularly scheduled evening classes.

Some courses involve field trips, lectures, or other activities scheduled outside of regular class hours. These experiences are listed in a course syllabus and course description whenever reasonably possible. If a schedule conflict occurs for a student, the student should contact the instructor and attempt to resolve the matter as soon as possible, and certainly substantially in advance of the event.

REGISTRATION PROCEDURE

Class scheduling is done through the Registrar's Office, which maintains all official academic records, sends out transcripts, supervises course registration and changes, and tracks students' progress in meeting degree requirements. Students register online through myDiplomat for courses that have been approved by their academic advisers. The class schedules of first-year students are prepared during the summer preceding entrance into the College. Subject to the payment of the appropriate fees, students may register for courses during the designated registration period. Exceptions to this are:

1. Students are responsible for satisfying prerequisites for a course; they may not register for courses with listed prerequisites that they have not completed unless they have permission of the instructor of the course or the chairperson of the department in which the course is offered. Credit for a course may be denied or later withdrawn if a student enrolls without the necessary prerequisites or prior approval of the instructor or department chairperson.
2. Certain courses require permission of the instructor prior to registration. Permission of the instructor may be withheld if a student has not completed the necessary prerequisites for a course, or has not done sufficient supplementary reading and work to prepare the student to profit from the course.
3. Registration in all courses is subject to availability of spaces in classes, and it is the student's responsibility to ensure that he or she is properly registered in all courses. Departments and instructors may, with the approval of the Provost and Dean of the Faculty, establish enrollment limits in courses. Enrollment may not exceed 50 in a course without permission of the Provost and Dean of the Faculty.
4. A student may be prevented from registering for courses if he or she has outstanding obligations to the College, such as an unpaid tuition balance or outstanding health forms, or an undeclared major in or after the fall of the junior year. In such cases, the student will be notified of the registration hold prior to the start of the registration period. The student will be eligible to register for courses once the outstanding obligation is met, providing that this occurs before the end of the add/drop period for the registration term.

FULL-TIME STATUS

A student must be enrolled for at least three course credits a semester (equal to twelve semester hours) to be regarded as a full-time student. The normal student workload is four course credits each semester. Students may register for a maximum of two course credits in any one Franklin & Marshall summer session. Two credits in a Franklin & Marshall summer session is regarded as full-time.

PART-TIME STATUS

Part-time status is defined as registration for fewer than three course credits. This option is not available during each of the last two regular semesters in which students are completing degree requirements in a semester.

A student approved for part-time status will be charged tuition on a per-credit basis. Independent studies, tutorials, directed readings, and internships-for-credit are all billed at the standard per-credit rate.

Part-time status may have some effect on the student's participation in College activities (e.g., intercollegiate athletics, College governance, etc.). Also, the part-time student may not be eligible for any form of institutional financial aid.

ADDING COURSES

After pre-registration has been completed, students may add open courses to their schedules through myDiplomat. Entering a course later than the second meeting of the class requires the approval of the course instructor. The deadline to add a course is typically 7 calendar days after the start of the semester. Students may "withdraw without record" until typically 13 calendar days after the start of the semester. It is the student's responsibility to ensure that he or she is properly registered in the courses being pursued.

COURSE CREDIT OVERLOADS

Course credit overloads are subject to the following rules:

1. A course load of four-and-one-half course credits (4.5) is not considered an overload.
2. A student may not take five course credits during his or her first semester of enrollment at Franklin & Marshall College.
3. After the first semester, students who in the previous semester were enrolled as full-time students and earned a semester grade point average of 2.50 or higher automatically qualify to enroll for five course credits.
4. Students who do not automatically qualify must petition the Committee on Academic Status for permission to enroll for five course credits.
5. After the first semester, students who in the previous semester were enrolled as full-time students and earned a semester grade point average of 3.50 or higher automatically qualify to enroll for up to six course credits. Students who meet this requirement and wish to enroll for more than six course credits must petition the Committee on Academic Status.
6. Students may register for more than four course credits beginning the day before the first day of classes.
7. A 0.5-credit course that meets only for half the semester (with a frequency for that half semester equal to that for a full-credit course) shall be considered to contribute a credit load of 0.5 for the entire semester.

WITHDRAWING FROM COURSES WITHOUT RECORD

A student may withdraw from a course or courses through Inside F&M during the "withdraw-without-record" period (typically 13 calendar days after the start of the semester), and no notation of the withdrawal will be made on the student's academic record.

WITHDRAWING FROM COURSES WITH RECORD

Withdrawals with record may occur after the "withdraw-without-record" period and before the withdrawal deadline. (The deadline is typically 10–14 calendar days before the last day of regularly scheduled classes.

Withdrawals with record are subject to the following rules:

1. Any student in his or her first semester at the College may withdraw with record from one course provided that full-time status is preserved; the student must submit a completed Course Withdrawal Form to the Registrar's Office and a "W" will appear on the student's academic record.
2. After the first semester at Franklin & Marshall College, a student may withdraw with record from two additional courses. This rule means that a student may withdraw from one of four courses in two different semesters or from two of five or more courses in one semester. In each case, the student must submit a completed Course Withdrawal Form to the Registrar's Office and a "W" will appear on the student's academic record.
3. Any student who does not follow the required procedures for withdrawing from a course will receive a grade of "F."

See the 2022-2023 academic calendar for official withdrawal deadline dates.

WITHDRAWING FROM COURSES AND PART-TIME STATUS

When withdrawing from a course (or courses) will result in a student being enrolled in fewer than three course credits, the student's status changes from full-time to part-time.

1. A student wishing to drop courses and assume part-time status must petition the Committee on Academic Status. Students should not assume that the Committee's approval is automatic.
2. Dropping to part-time status is an unusual step, and Committee approval depends upon the existence of extenuating circumstances such as health problems or unusual personal difficulties.
3. The deadline for submitting a petition for part-time status is the last day of classes in that semester.

PASS/NO PASS OPTION

The College encourages students to broaden their educational experience by taking courses across many different disciplines and following their interests into new arenas. To facilitate this exploration, students may take one course each semester P/NP in a four course semester, up to a maximum of six credits over their career at F&M. This means that their transcript will record a "P" for that class rather than a letter grade, as long as the student successfully completes the course. The student gets credit toward graduation for the course, but there is no impact on the cumulative GPA.

How to use the P/NP option:

1. A student may elect to take a course on a Pass/No Pass basis six times in their F&M career.
2. A student may elect one course per semester as P/NP. If

a student is enrolled for five or more course credits in a single semester, two courses may be taken on a Pass/No Pass basis that semester.

3. The Pass/No Pass option may not be used when completing a course that satisfies a requirement for a major, minor, or special studies area of concentration (including specified related courses), nor may it be used for Connections seminars..
4. Students may use the P/NP option for classes that satisfy the Explorations phase of the curriculum (that is, courses that meet the Arts, Humanities, Social Sciences, Natural Sciences, Language Study, and World Perspectives or Non-Western requirements), with a limit of one use for each individual Explorations requirement. For three-credit certificates, students may use the PNP option once. For four- and five-credit certificates, students may use the P/NP option twice.
5. Students may retroactively uncover the grade of a course that they originally took P/NP, but now wish to count toward a major, minor, or special studies area of concentration, or for any other reason. Uncovering a grade from a course elected as Pass/No Pass does not allow for an additional (i.e., seventh) P/NP course.
6. Students may select the P/NP option for a class at any point until the deadline for course withdrawal with record, which is typically 10-14 calendar days before the last day of regularly scheduled classes.
7. A grade of D- or better earns a P.
8. Courses taken Pass/No Pass that receive a grade of "P" earn credit toward graduation, but they are not included in the calculation of grade point averages.
9. One summer session course credit may be taken each five-week term on a Pass/No Pass basis. This option applies only to courses taken at Franklin & Marshall College or a Central Pennsylvania Consortium school.
10. To choose P/NP for a class, students submit the correct form to the Registrar's Office with the signature of their adviser (if the adviser is also the professor of the course, then students should obtain the signature of the department chair or associate dean). The professor will not know the grade status of the students in their courses, because it is irrelevant to how faculty teach, mentor, and grade students. Faculty will grade all student work and submit a final grade for all students, regardless of whether or not the student is taking the course P/NP.

REPEAT OF A COURSE

College policy permits a student to repeat a Franklin & Marshall course for a grade only if the previous grade was "D+," "D," "D-," "F," or "NP." Please note that a subsequent offering of a particular course cannot be guaranteed.

The following rules apply to repeating a course:

1. When a course is repeated, it counts only once for credit toward the degree.
2. When a course is repeated, only the most recent grade is included in the calculation of the cumulative grade point average and the average in the major or minor. Both grades, however, appear on the permanent record, with a notation next to the original grade indicating that the course was later repeated.
3. Repeated courses must be taken for a regular grade unless the first grade was an "NP." When the original grade was an "NP," a student may elect either the Pass/No Pass or regular grading options.
4. No course may be taken more than twice without the approval of the Committee on Academic Status.
5. No course that is a prerequisite to another course may be repeated if the higher level course has been passed successfully ("P," or "D-" or higher).
6. No course may be repeated by taking a proficiency exam.
7. A student may not use the repeat option more than three times.
8. An allowable repeat of a course must be taken at the same institution where the course was originally taken. In particular, courses originally taken at Franklin & Marshall with a grade of "D+," "D," "D-," "F," or "NP" may only be repeated at Franklin & Marshall. Students may petition the Committee on Academic Status for exceptions to this policy.
9. As clarification, if a course for which the original grade was "D-" or higher is repeated, and if a withdrawal ("W") occurs in the repeat, then the original grade and credit are retained. If, however, the course is failed when repeated, the original credit is lost. If a course for which the original grade was "F" is repeated, and if a withdrawal ("W") occurs in the repeat, then the original grade remains for grade point average calculations.
10. Election of the repeat option requires the submission of a form to the Office of the Registrar.
11. It is the student's responsibility to verify that repeated courses are properly noted on the transcript.

AUDITING COURSES

There is no official auditing of courses at Franklin & Marshall College. Any full-time student may, with the prior permission of the instructor, attend a course for which the student is not registered. There is no record of this shown on the student's transcript.

ATTENDANCE AT CLASS

At the opening meeting of each course, instructors state their policy on class attendance. Subject to the discretion of individual instructors, students are expected to attend all scheduled meetings, lectures, discussions and laboratory periods that make up the course. Students who violate instructors' rules of attendance may receive a grade of "F." In addition, when the rules of attendance are clearly communicated in the course syllabus or in a similarly explicit manner, a student who violates the attendance policy may be dismissed from the course upon the joint agreement of the instructor and the College House Dean. Students who are dismissed from a course for excessive absences may be reinstated only by the joint consent of the instructor and the College House Dean.

Students who believe that they are obliged to miss class for health or counseling reasons should see those offices in advance, unless emergency conditions prevent. The Student Wellness Center does not issue class absence notes and encourages students to communicate with their professors before missing class, although there are certain health

situations for which professors will receive communication from the Student Wellness Center or College House Deans, detailed on the Student Wellness Center's web site. Students with other reasons that they believe are valid for missing class should contact their College House Deans, also in advance unless emergency conditions prevent.

The academic calendar of the College is a secular one. A student who has a schedule conflict due to a religious obligation should discuss the situation with his or her professors prior to the date of the conflict; any accommodation would be at the discretion of the faculty member. A calendar of religious holidays is available on the College's academic calendar web page.

PETITIONS FOR EXCEPTIONS TO ACADEMIC POLICIES

Students may petition the Committee on Academic Status for exceptions to academic policies of the College. Petition forms may be accessed from the Registrar's Office's website, www.fandm.edu/registrar/ forms.

MAJORS, MINORS AND CERTIFICATES

MAJORS

The regulations for admission to, and the maintenance of, an academic major at Franklin & Marshall College are as follows:

1. A student must submit to the Registrar a major declaration form, approved by the chairperson of the department in which the student chooses to major, by the end of the second semester of the sophomore year. Students who have not yet declared a major by the fall semester of their junior year will not be eligible to register for future classes until they have declared a major.
2. A department may refuse a student admission to "regular" major status or dismiss a student from "regular" major status only in the following circumstances:
   a. If, after the end of the sophomore year, the student has not taken courses in the department, or has failed to attain a grade point average of at least 2.00 in those courses within the major.
   b. If the student has failed to meet other clearly defined academic criteria, approved by the Educational Policy Committee, for admission to or continuance in the major in the department.
   c. A maximum of one hundred fifteen (115) students from any class may declare a major in Business, Organizations, and Society
3. Departments will establish a "provisional major" category to which students are assigned when their circumstances fit the situations outlined in Item 2. The department chairperson notifies the Registrar when a student is made a "provisional" major or is granted regular major status. If a student fails to satisfy departmental criteria for major status after one semester as a "provisional" major, the student may be dropped as a major by departmental action.
4. A student is permitted to continue in College for one semester without a major after having been dismissed from a major.
5. Appeals from students concerning their major status may be made to the Committee on Academic Status.

SPECIAL STUDIES MAJOR PROGRAM

The rules governing the Special Studies major program include the following:

1. A student must prepare a proposal that includes a succinct but accurate title for the major, a brief description and a list of courses, including course numbers and names and grades in any courses already taken. The proposal must also include a rationale for proposing a Special Studies major instead of a double or Joint Major or a major/minor combination.
2. Courses must include at least five courses from one department/program, five divided between two other departments/programs and a one-semester independent study, SPC 490. Courses may include additional research (490) courses, Directed Readings and pre-approved courses taken at other institutions, including study abroad courses. The total number of courses may not exceed 16.
3. The proposal must also include the signatures of a primary adviser, a secondary adviser and the official academic adviser to Special Studies majors. The primary adviser is usually a member of the department/program in which five or more courses are taken.
4. When the proposed major intersects with programs such as Africana Studies, International Studies, Comparative Literary Studies, Science, Technology and Society, or Women's, Gender and Sexuality Studies, the major should be designed in consultation with that program and approved by the program chairperson.
5. A student must submit a copy of the approved proposal and a course projection sheet to the Registrar's Office.
6. Changes to the original major proposal, including course substitutions, must be approved by all of the student's major advisers.
7. Students in the Special Studies program can, if they have an outstanding academic record, pursue Academic Honors by writing a formal thesis and submitting to an oral examination by a committee of at least three voting faculty members. Such students are subject to the rules governing departmental or program honors.
8. A student who has declared a Special Studies major may not apply more than three courses from that major toward a second major or minor.

Interested students should consult Dr. Amelia Rauser, Associate Dean of the Faculty, who is the official academic adviser to Special Studies majors

JOINT MAJOR

A Joint Major is a group of courses from two departments/programs and requires a rationale and the approval of both departments/programs and the Associate Dean of the Faculty. Each of the component majors must be represented by eight distinct course credits, so that the Joint Major consists of sixteen distinct courses.

The following rules govern Joint Majors:

1. A Joint Major must be approved by both programs or departments and by the Associate Dean of the Faculty, A Joint Major must be approved by both programs or departments and by the Associate Dean of the Faculty, Dr. Amelia Rauser.
2. Students must submit a projection form to the Registrar's Office from each department or program. The student must provide a rationale* for the Joint Major.
3. Changes to the original major proposal, including course substitutions, must be approved by both of the student's major advisers.
4. Students who have declared a Joint Major may not apply more than three courses from that major toward a second major or minor.
5. At least one of the departments/programs combined in the Joint Major must offer its own major.

*Additional details about the content of the rationale are provided on the application form.

OPTIONAL MINOR

The regulations for admission to an academic minor at Franklin & Marshall College are:

1. Students may elect to pursue a minor in any department or program offering an approved minor program.
2. Approved minor programs consist of six course credits arranged by a department or program to constitute an integrated, cumulative academic experience.
3. Minors should be declared before the beginning of the senior year.
4. All courses in the minor must be taken for standard grades, and the student must pass all six course credits with at least a 2.00 grade point average overall.
5. At least four of the minor courses must be taken at Franklin & Marshall College.
6. A student may officially declare only two minors.
7. To declare a minor, a student consults with the designated department or program chairperson and submits a minor declaration form to the Registrar's Office.
8. A student who has declared a Special Studies major may not apply more than three courses from that major toward a minor.
9. A student who has declared a Joint Major may not apply more than three courses from that major toward a minor.

OPTIONAL CERTIFICATE

A certificate is a curated list of three to five credit-bearing activities in two or more departments that faculty have identified as providing a closely, coherently, and intentionally interrelated set of topics and/or skills. As certificates are not graduation requirements, students should prioritize their majors and/or minors for scheduling. Faculty are not expected to make scheduling accommodations in order for students to complete a course for a certificate.

The regulations for admission to and completion of a certificate at Franklin & Marshall are:

1. Students may not sign up for certificates before their sophomore year.
2. To declare a certificate, a student must consult with the certificate contact person and submit a certificate declaration form to the Registrar.
3. Certificates cannot share more than one credit with another major, minor, certificate, and general education requirement. For example, a student could enroll in a certificate that shares one credit with a major and one credit with their gen ed requirement. However, that student could not enroll in a certificate that includes two courses for their major.
4. A student may not select the Pass/No Pass option on more than 1 course in a three-credit certificate, or on more than 2 courses in a four- or five-credit certificate.
5. It is possible for a certificate to require extra-curricular activities. Students are responsible for evaluating all of the requirements before declaring a certificate.

ADDITIONAL SPECIAL EDUCATIONAL OPPORTUNITIES

Students at Franklin & Marshall College may earn academic credit by completing a number of additional special educational opportunities including Tutorials, Directed Readings, Independent Studies and Internships-for-Credit. The smallest unit of credit offered at Franklin & Marshall is one half (0.50).

TUTORIALS

A Tutorial is a regular course (either one that is a permanent part of the curriculum or one taught as a "topics" course) taught on an individual basis. A student may register for a Tutorial with the consent of the instructor and the approval of the department chair. The student should complete an "Application for Tutorial" form available in the Registrar's Office and on its website.

DIRECTED READINGS

A Directed Reading is an investigation of a topic through readings chosen by a student with the agreement of the instructor. Assignments normally include multiple short papers as opposed to a thesis. A student may register for a Directed Reading with the consent of the instructor and the approval of the department chairperson. The student should complete an "Application for Directed Reading" form available in the Registrar's Office and on its website.

INDEPENDENT STUDIES

An Independent Study consists of an extensive research project completed under the supervision of a faculty member.

The following rules govern Independent Studies:

1. An Independent Study must be approved by a faculty adviser and the department chairperson.

2. An Independent Study must culminate in a thesis or performance.
3. The student and the adviser for the Independent Study should agree in advance whether the project will extend over one or two semesters, for one-half, one or two course credits.
4. The deadline to register for an Independent Study is the end of the first week of the semester in which the Independent Study is undertaken.
5. To register for an Independent Study, a student completes the "Application for Independent Study" form and returns it to the Registrar's Office.
6. If an Independent Study is to be considered for Departmental Honors, the additional guidelines described in the section on Departmental Honors should also be observed.

The regulations governing grading options for an Independent Study are as follows:

1. If the student elects the standard letter grade option, the student registers under normal procedures and presents the required Independent Study application with the department or program chairperson's approval. It should be noted that this is the only one of the grading options that is automatic. Each of the others requires additional input to the Registrar from the student, the department chairperson, or both.
2. The student may elect the Pass/No Pass option in the first semester of a two-semester Independent Study. In this case, the student completes the Independent Study application and a Pass/No Pass form, including the signature of the chairperson, and files it with the Registrar before the add deadline. This procedure differs from the normal Pass/No Pass regulations in that the instructor (i.e., the Independent Study adviser) knows about the use of the option and reports the grade directly as Pass or No Pass.
3. In some cases the department requires the Pass/No Pass option in the first semester of a two-semester Independent Study. In this instance, the chairperson notifies the Registrar in writing prior to the add deadline. This note must include the name of each student involved. The chairperson should also indicate this requirement on the approval form given to the student when the student requests permission for Independent Study.
4. If the student elects the "no grade/double grade" option, then no grade and no course credit are awarded at the end of the first semester and two grades and two course credits are awarded at the end of the second semester. The use of this option must be approved by the chairperson of the department or program. This option must be indicated on the Independent Study application and cannot be selected after the deadline to add courses. In other words, this option is viable only for an Independent Study originally designed to cover two semesters and for which it is not realistic to assign a grade halfway through the Independent Study.
5. For Independent Studies under the "no grade/double grade" option, the deadline to withdraw without record is the "withdraw-without-record" deadline for regular courses during the first semester. A withdrawal beyond that date, but during the first semester, will result in a "W" (withdrawal with record) on the student's transcript for only the first semester. Withdrawal (after the "withdraw-without-record" deadline) during the second semester will result in a "W" on the student's transcript for both semesters.

INTERNSHIPS-FOR-CREDIT

Students may earn academic credit for an internship during the summer or academic year. An Internship-for-Credit ("IFC") has two primary components, both of which are expected to take place over the same time period. The first component involves on-site duties and responsibilities—the structured practical experience articulated through a Job Description provided by the employer or sponsoring organization. The second component is encompassed in an Educational Plan developed by the student in conjunction with his/her/their F&M faculty sponsor, and includes a bibliography of related readings, a schedule of agreed-upon consultations between the student and F&M faculty sponsor, and a description of the final graded work product (i.e. project, paper, or performance) the student will complete for the F&M faculty sponsor. The faculty member will receive a brief appraisal of the student's performance from the on-site supervisor

The following regulations govern Internships-for-Credit:

1. To apply for an IFC, students must:
   a. Have sophomore, junior, or senior status;
   b. Have a cumulative grade point average ("GPA") of at least a 2.0. Students whose GPA is less than 2.0 may petition the Committee on Academic Status for an exemption;
   c. Have secured an internship with an off-campus organization for which they are seeking credit.
   d. Have identified and secured the agreement of an F&M faculty member to serve as the faculty sponsor and adviser for the IFC experience.
2. All IFCs are graded on a Pass/No Pass basis and are subject to Pass/No Pass regulations. Credit earned for passing an IFC will, accordingly, not count toward a student's major or minor.
3. Once the student has completed the IFC, the faculty sponsor may receive a brief statement of appraisal of the student's performance from the on-site Internship supervisor. However, the most important element in determining the grade will be those items specified on the Educational Plan for the IFC.
4. The cost of a summer IFC is not covered by regular tuition and must be handled directly with the Business Office.
5. Students may receive one-half, one, or two course credits for an IFC, depending upon the time commitment per week or the length of the project. Two-course-credit IFCs occur over two consecutive semesters, or an entire summer and an adjoining semester with the summer counting as one semester. A one-course-credit IFC must involve a minimum of 96 hours for the semester. Almost all summer IFCs are half-time or full-time over 10-12 weeks.
6. Students who enroll for a two-semester IFC may not elect the "no grade/double grade" option.
7. Only two course credits from Internships may count

toward the completion of graduation requirements.
8. Students may simultaneously receive compensation and credit for an internship.

The Office of Student & Post-Graduate Development (OSPGD) facilitates the IFC program. IFC application materials along with detailed instructions, guidelines and Educational Plan samples may be found online at OSPGD's IFC website. Students must complete all aspects of the IFC application, including the Educational Plan and Internship Description, and secure the signatures of his/her/their Internship Supervisor, Academic Adviser, F&M Faculty Sponsor, and Faculty Sponsor's Department Chair before submitting the IFC application packet to OSPGD.

COMMUNITY-BASED LEARNING SEMINARS

Community-Based Learning (CBL) seminars integrate experiential learning in the community with academic learning in the classroom. Coursework takes a critical perspective on the seminar's topic and requires significant reflection on the experiential learning. The experiential learning component varies from course to course: instructors may cultivate internships for the students or design a series of community-based experiences.

The following regulations govern CBL seminars:

1. The expectation for classroom time is 2–3 hours per week, and the expectation for experiential learning is 5–6 hours per week, for a total range of 7–9 hours.
2. CBL seminars are either designated a course in the curriculum (and carry a departmental/programmatic prefix with the additional notation of "CBL") or be designated a CBL-IFC. Either way, the seminar requires the approval of the instructor's department/program chair.
3. The courses are offered at the 200-, 300-, or 400-level.
4. There is no limit to the number of CBL seminars a student may take.

EXCHANGE OPPORTUNITIES

The following policies govern course registration in the exchange programs at Millersville University, the Lancaster Theological Seminary and the Central Pennsylvania Consortium colleges of Gettysburg College and Dickinson College:

1. Only courses that are not available at Franklin & Marshall College may be taken at another institution for credit.
2. A student may register for one course per semester at Millersville University or the Lancaster Theological Seminary. A student may spend a semester or a year in residence at Gettysburg College or Dickinson College, in addition to the option of taking one course per semester while in residence at Franklin & Marshall.
3. Permission forms must be obtained from the Registrar, and the course must be included on the student's Franklin & Marshall schedule.
4. This free exchange provision pertains only to regular semesters (Fall and Spring) and is open only to full-time, matriculated (degree candidate) students.
5. Under the exchange procedure, three-credit-hour offerings are awarded a full course credit at Franklin & Marshall College. This provision applies to all courses at the exchange institutions, including those (e.g. summer courses) not covered by the exchange agreement.
6. Such courses are noted on the student's academic record with the assigned grades indicated and included in the student's grade point average calculations. Exchange courses may be taken Pass/No Pass if appropriate. This provision applies to all courses at the exchange institutions, including those (e.g. summer courses) not covered by the exchange agreement.
7. Enrollment in exchange programs may delay graduation clearance for second-semester seniors. Franklin & Marshall credit is given only upon receipt of an official transcript sent directly from the exchange institution to the Franklin & Marshall Registrar's Office.
8. If a course is repeated after having received an original grade of "D+," "D," "D-," "F," or "NP," the repeat must take place at the same institution at which the course was originally taken. In particular, courses originally taken at Franklin & Marshall that are eligible to be repeated may not be repeated at an exchange institution.

EARLY COMPLETION OF THE DEGREE

In some cases, students may be able to complete their degree requirements in fewer than eight semesters at Franklin & Marshall. Credits earned prior to matriculation through the Advanced Placement, International Baccalaureate, or related systems, taking additional courses during summers, or taking course overloads during semesters may lead to early completion of the degree for some students.

Students contemplating the completion of their degree in fewer than eight semesters should discuss this matter with their academic adviser as early as possible. For students who pursue this possibility, special advising resources are available to assist the student in creating a plan that is feasible and educationally sound.

EVALUATION AND GRADES

It is College policy that members of the faculty judge the academic quality of students' work and assign a grade as a measure of their evaluation. This responsibility may not be delegated.

RETURN OF STUDENT WORK

All work submitted by students for evaluation in a course must be returned to them as expeditiously as possible, usually within two weeks of submission. With the exception of term papers, work submitted prior to the final week of classes should normally be returned no later than the final class period.

PRIVACY POLICY

It is the policy of Franklin & Marshall College to ensure that student grades are a private matter between student and faculty member, to be shared only with authorized officials of the College, unless the student signs a statement giving permission for his or her grades to be released to a third party, or as

otherwise permitted by law. This policy entails the following:

1. All graded student assignments must be returned individually to students in such a way as to protect the confidentiality of the grade and the privacy of the student.
2. In many cases, it is helpful for students to know the distribution of grades for an assignment without specific identification of grades for individual students. In cases where the instructor believes this to be appropriate to the goals and methods of a particular course, he or she should regularly inform students of the class-wide grade distribution on graded assignments.
3. Student grades may not be publicly posted; instead, grades must be communicated individually to students.

GRADES

The letter grading system uses 12 passing grades ("A" through "D-," and "P") and two failing grades ("F" and "NP"). Their numerical values, used to calculate a student's grade point average, are as follows:

A	—	4.00	C	—	2.00
A-	—	3.70	C-	—	1.70
B+	—	3.30	D+	—	1.30
B	—	3.00	D	—	1.00
B-	—	2.70	D-	—	0.70
C+	—	2.30	F	—	0.00

"P" (Pass) and "NP" (No Pass) grades are not used in calculating a student's grade point average.

The following definitions offer verbal descriptions of the value of grades:

A, A- = EXCELLENT. Work of consistently high standard, showing distinction.

B+, B, B- = GOOD. Work showing superiority in such qualities as organization, accuracy, originality, understanding and insight.

C+, C, C- = SATISFACTORY. Work that fulfills essential requirements in quality and quantity and meets the acceptable standard for graduation from Franklin & Marshall College.

D+, D, D- = PASSING. Work that falls below the acceptable grade point average standard for graduation, yet is deserving of credit in the course.

F, NP = FAILING. Work undeserving of credit in the course. An "NP" grade does not affect a student's grade point average.

I = INCOMPLETE: see the following section.

NC = NO CREDIT (for activities offered on a non-credit basis).

NG = NO GRADE. A temporary mark indicating the final grade has not yet been submitted.

Course rosters do not distinguish between students taking a course on a Pass/No Pass basis and students taking a course on a letter-graded basis. Faculty members report letter grades for all students, including those taking the course on a Pass/No Pass basis. Grades of "A" to "D-" are converted by the Registrar to "P." Grades of "F" are converted to "NP." Any questions concerning the Pass/No Pass option should be directed to the Registrar's Office.

INCOMPLETE GRADE

A temporary grade of Incomplete ("I") is given by a faculty member, only with the prior approval of a College House Dean, when a student is not able to complete the required work in a course within the normal time period. Incompletes are authorized only when there are extenuating circumstances beyond the student's control. An Incomplete is never justified when the student simply has neglected to complete course work on time.

There may be courses in which the content or format make Incomplete grades inappropriate. Moreover, if a student has been absent from a number of classes or has a substantial number of assignments outstanding, an Incomplete grade may also not be appropriate.

Incomplete grades are to be replaced by permanent grades no later than thirty days after the end of the final examination period in any semester. This deadline is subject to appeal to the Vice President and Dean of Student Affairs. In cases in which the course work is not completed by the assigned deadline, and an extension has not been requested and granted, the grade of "I" may be automatically converted to an "F" in the Registrar's office.

GRADE REPORTS

Grades are reported to students through their transcripts through myDiplomat. In compliance with the Family Educational Rights and Privacy Act of 1974, Franklin & Marshall College does not automatically send grades to parents. Students may authorize the regular release of grades to their parents by signing a formal release form available in the Registrar's Office. Transcripts may be withheld from the student if the student has an outstanding balance with the College.

RANK IN CLASS

All full-time students are ranked by cumulative grade point average at the end of each semester according to their anticipated graduation year as determined by the Registrar's Office. When students graduate, they are ranked with all other students who were awarded degrees in the same academic year. Rank in class is printed on students' official transcripts only after they have graduated.

TRANSCRIPTS

Official transcripts are released by the Registrar's Office to designated parties upon formal request by the student. Current and former students may make these requests through Parchment Exchange, or in person in the Registrar's Office. Transcripts are generally mailed within three working days of the receipt of the request. Students requiring same day service may be charged a fee. Instructions for requesting a transcript can be found at fandm.edu/registrar/managing-credits/transcript-requests.

There is no fee for this service if fewer than ten transcripts per academic year are requested. This service may be denied if the student or former student has an outstanding balance with the College or if there is a pending disciplinary matter.

CHANGES IN A RECORDED GRADE

After a student's course grade is officially recorded, a change may be made only with the approval of the Committee on Academic Status through a petition from the faculty member stating good and sufficient reason for the change. Grade changes may not be requested on the basis of student work submitted after the official grading deadline.

A significant part of the Committee on Academic Status' rationale is that a change in a student's grade should be made only after grades for all students enrolled in that course have been reviewed, and the instructor is reasonably sure that no other student is affected unjustly by not having had an equivalent review of his or her reported grade.

The petition submitted by an instructor should include both an explanation of the reasons why the change is required and a description of how discrimination against other students has been prevented. A grade change petition form is available in the Registrar's Office.

APPEAL OF A GRADE BY STUDENTS

Students are entitled to objective, professional evaluation of their academic work and to fair, equitable treatment in the course of their academic relationships with members of the faculty. These criteria are observed by members of the Franklin & Marshall faculty as a part of their professional responsibilities. Misunderstandings have traditionally been resolved by direct discussion between students and professors, and this manner of resolving problems is normally both appropriate and sufficient. Should a student believe that he or she has a legitimate grievance regarding his or her grade for a course, the first step is thus to consult directly with the instructor for the course. Instructors may have explicit guidelines for how these appeals are to be registered, and students should follow those guidelines if they exist.

If the student then believes that the grievance has not been reconciled by this direct communication, he or she may pursue the matter by consultation with the department or program chair. In these instances, the student shall in a written statement provide a full, fair account of the incident or circumstances giving rise to the grievance. The chair shall review the statement, talk or meet with the student, and talk with the professor. (Note: if the department or program chair is also the instructor for the course, the student should consult directly with the Office of the Provost.) If, after this review, the chair finds that the matter does not merit further consideration, the chair shall inform the student and the professor of this conclusion.

If, however, the chair finds that the matter is not comprehended in established College regulations or for other reason merits further consideration, the chair will bring the matter to the Provost (or Provost's designee). If an instructor is no longer employed by the College, and does not respond to inquiries from the student and the department chair in a reasonable amount of time, the chair shall automatically bring the matter to the attention of the Provost (or designee). In addition, a student may appeal the department chair's decision not to pursue a complaint to the Office of the Provost.

In all cases where such a complaint about a grade reaches the Office of the Provost, the following procedure shall apply. The Provost (or his/her designee) shall consult with the department chair, and together they will review the student's statement, the conversations, and any other materials they deem necessary. The Provost (or designee) will also hold a direct conversation with the student, if the student so wishes, and with the professor if deemed necessary. The chair and the Provost (or designee) shall then jointly determine a resolution of the matter (which shall be submitted to the Provost in cases where the Provost him- or herself was not a party to the discussions). In all such cases, only the Provost has the ultimate authority to approve grade changes, and the Provost's decision shall be considered final. The Office of the Provost shall in all cases be mindful of the principles contained in the College's Statement of Academic Freedom and Tenure. If, in the judgment of the Provost, the grievance is of such gravity that its resolution would have an impact on the welfare of students generally or on the conduct of professional responsibilities in the College, she or he may consult with the Professional Standards Committee and/or the College's General Counsel.

EXAMINATION PROCEDURES

FINAL EXAMINATIONS

Schedules of final examinations are prepared by the Registrar and published several weeks before the examination period begins. All final examinations are offered during three examination periods each day that are up to three hours in duration, scheduled as follows: 9 a.m. to noon; 2 p.m. to 5 p.m.; 7 p.m. to 10 p.m. Prior to the exam period, there are four reading days, during which no assignment, paper, or project due dates or sessions that require attendance may occur.

Athletic competitions, including those for both intercollegiate and club teams, are not to be scheduled during the final exam period or the preceding "reading days." The exception to this policy is postseason competition associated with Franklin & Marshall's membership in the Centennial Conference.

Examinations that cover a substantial portion of the semester's work, and that count a significant percentage of the semester grade, may not be given at a time other than the designated final examination period.

A student scheduled for three examination periods in a row (whether over one or two calendar days) may request a make-up time for the second of the three examinations scheduled. Such requests require a two-week advance approval by the Registrar's Office, which verifies the situation and notifies the professor involved. Faculty must honor approved requests.

Unless students are scheduled for three consecutive examinations, they are expected to take all finals as scheduled. Instructors are not permitted to make individual arrangements or exceptions.

When individual students are faced with extenuating circumstances beyond their control, a final examination may be rescheduled with the approval of the Registrar. This examination must be taken no later than two days before the official date for end-of-semester grades.

Instructors may not reschedule a final exam for an entire class without the approval of the Registrar. If the Registrar has approved the final to be rescheduled, the Registrar will notify the students and faculty member. If a final is rescheduled and

no notification of official approval has been received, the students should contact the Registrar.

No re-examinations are permitted for the purpose of raising a grade.

PROFICIENCY EXAMINATIONS

Proficiency examinations are available only to full-time students and may not be taken for any course in which the student registered during the previous calendar year or which he or she has completed with a grade (including "F" or "NP") at any time. A proficiency examination may not be taken for any course that is a prerequisite for a course in which the student has ever been enrolled. Students who are approved to take proficiency examinations should not expect the faculty to provide any special tutoring. Proficiency examinations are not intended to be taken so as to receive credit for work substantially undertaken at Franklin & Marshall College but for which credit has not been received.

Students interested in receiving credit through a proficiency examination must adhere to the following procedures:

a. The student must secure permission from the department chairperson to take the examination; the chairperson has the right to deny such requests. If the chairperson grants the request, he or she completes an Application (available in the Registrar's Office) indicating the agreed-upon date of the examination.
b. The student takes the Application to the Cash Handling office in the Steinman College Center, pays a non-refundable proficiency examination fee of $100, and receives a receipt. The Application and receipt are returned to the chairperson.
c. The chairperson sends the Application and receipt, with his or her signature certifying approval, to the Registrar and indicates the date the Registrar can expect the department's decision as to credit awarded. The chairperson also consults with the instructor of the course to determine the best time and place for the examination and notifies the Registrar of that decision.
d. The student takes the examination on the assigned date. The student may expect the results of the examination shortly after the deadline established by the chairperson for the results to be submitted to the Registrar.
e. The chairperson notifies the Registrar's Office of both positive and negative results of all proficiency examinations.
f. The Registrar's Office informs the student and his or her academic adviser of the results. Only results awarded course credit are recorded on the student's permanent record. No grade is assigned; the course does not count as either Pass/No Pass or a regularly graded course.

Each credit earned through a proficiency examination reduces the student's 32-course-credit graduation requirement by an equivalent amount of course credit. Such course credits cannot count toward the 16 course credits that must be earned at Franklin & Marshall College nor toward the 21 course credits that must be earned with standard grades. Students may not earn credit for courses in basic language in modern languages (normally the first four courses in the sequence) by proficiency examination.

For any approved proficiency examination in a course not in the Franklin & Marshall curriculum, the student is responsible for any fees of outside examiners, in addition to the regular Franklin & Marshall proficiency examination fee of $100 per course.

TRANSFER OF CREDIT POLICIES

All transfer students will be expected to adhere to all graduation requirements listed in this Catalog unless noted otherwise below.

Transfer credit is only considered for college courses that are documented on an official transcript sent directly to the Registrar's Office from the original institution.

Specific courses are approved for transfer credit based on the following considerations:

a. Existence of comparable courses in the Franklin & Marshall curriculum;*
b. Accreditation of the institution offering the course (courses taken at institutions accredited by one of the regional accrediting commissions are generally eligible for transfer consideration);
c. Intended field of concentration (including related courses);
d. General Education requirements; and
e. Grades earned ("C-" or better is required for courses taken prior to matriculation; "D-" or better is required for courses taken after matriculation; courses taken on a Pass/No Pass basis are generally not eligible for transfer credit).

*Subjects generally not approved for transfer credit include:

i. Technical courses;
ii. Communications courses (including oral communications);
iii. Most education courses;
iv. Engineering courses;
v. Physical education courses;
vi. Criminal justice courses;
vii. Secretarial courses;
viii. Drafting courses;
ix. Courses in military science;
x. Real estate courses;
xi. Vocal or instrumental music lesson credits.

TRANSFER OF CREDIT PRIOR TO MATRICULATION (TRANSFER STUDENT)

College credit earned prior to matriculation at Franklin & Marshall College is transferred on the basis of courses in which the student has earned grades of "C-" or better. The total amount of Franklin & Marshall transfer credit is determined by dividing the total semester hours of approved credit by four (the number of credit hours per course at Franklin & Marshall College). (Transfers from a quarter-hour system divide total quarter hours by six.)

A student must complete a minimum of 16 course credits

at Franklin & Marshall College regardless of the amount of credit transferred and even if all other degree requirements can be met with fewer than 16 course credits.

Grades in transferred courses are not included in the Franklin & Marshall grade point average. Thus, they are not taken into account in the determination of College honors. Grades in transferred courses taken prior to matriculation are not posted on a student's Franklin & Marshall transcript. Transfer credit for graded college courses will count toward the requirement that a student must pass 21 regularly graded credits to graduate from Franklin & Marshall College.

Online courses may transfer upon approval of the appropriate academic department chairperson. They are awarded general elective credit only.

Franklin & Marshall College grants credit for some nontraditional course work, such as the following:

a. Armed Services Language Institutes (transcripts evaluated with approval of appropriate language department chairperson)
b. Nursing degree (up to eight course credits)
c. Advanced Placement Examinations
d. International Baccalaureate Diploma
e. CLEP Subject Tests
f. Proficiency examinations

Credentials from institutions outside of the United States are evaluated on a case-by-case basis and may require the services of a course credit evaluation agency at the student's expense.

Courses in question are referred to the department chairperson, whose decision is the final authority.

Incoming transfer students are granted Franklin & Marshall credit upon receipt of their final official transcript from their previous institution. This transcript must be mailed or sent via a secure electronic transcript service directly from the previous institution to the Franklin & Marshall Registrar's Office.

Transfer credit for college coursework is part of a student's official education record. Once transfer credit is awarded for a course, the course cannot be removed from the student record.

TRANSFER OF CREDIT AFTER MATRICULATION

No credit may be transferred for courses taken during a fall or spring semester in which the student is enrolled at Franklin & Marshall.

Transfer of credit requires approval of the appropriate department chairperson at Franklin & Marshall College before the course is taken. Credentials from institutions outside of the United States are evaluated on a case-by-case basis and may require the services of a course credit evaluation agency at the student's expense.

Transfer courses may not count toward the Natural Science in Perspective (NSP) requirement unless they are determined by the appropriate department chairperson to be the direct equivalent of an existing Franklin & Marshall NSP course.

Online courses may transfer upon approval of the appropriate academic department chairperson. They are awarded general elective credit only.

The amount of transfer credit awarded for a successfully completed, approved course is determined only on the basis of the following equation:

Franklin & Marshall course credits = number of semester hours divided by four, OR number of quarter hours divided by six (to the nearest .25, minimum: .25)

By this formula, the following Franklin & Marshall credit equivalencies can be made for a single course:

1 semester hour	=	.25 F&M course credit
2 semester hours	=	.50 F&M course credit
3 semester hours	=	.75 F&M course credit
4 semester hours	=	1.00 F&M course credit
1 quarter hour	=	no F&M credit
2 quarter hours	=	.25 F&M course credit
3 quarter hours	=	.50 F&M course credit
4 quarter hours	=	.75 F&M course credit
5 quarter hours	=	.75 F&M course credit
6 quarter hours	=	1.00 F&M course credit

It is important to note that while the department chairperson determines what course a student can take to transfer credit and what specific course requirement at Franklin & Marshall College will be met through taking the course (major, minor or elective), the chairperson cannot authorize a student to transfer credit according to any formula other than that explained above.

If Franklin & Marshall credit is received for a specific course that was taken elsewhere, then the student may not retake the course at Franklin & Marshall.

Transfer credit for college coursework is part of a student's official education record. Once transfer credit is awarded, it cannot be removed from the student record.

GRADES FOR APPROVED TRANSFER AND STUDY ABROAD CREDIT AFTER MATRICULATION

1. In order to receive transfer credit, a passing grade must be earned ("D-" or above) and must be reflected on an official transcript sent directly to the Registrar's Office from the host institution.
2. All courses must be taken for a regular grade (not Pass/No Pass).
3. All transferred grades, including failing grades, will be entered onto the Franklin & Marshall transcript but will not be calculated into the Franklin & Marshall cumulative grade point average. One set of exceptions regards work completed at a Central Pennsylvania Consortium institution, the Lancaster Theological Seminary, or through the Millersville Exchange program. An additional exception regards courses taken in the fall, spring, or summer sessions of Advanced Studies in England. All courses taken by Franklin & Marshall students at ASE will be treated the same as courses taken at Franklin & Marshall; the grades for ASE courses will be counted in the Franklin & Marshall cumulative GPA with four semester-hour courses receiving one Franklin & Marshall credit.
4. Transfer credit may not be received for a course already taken at Franklin & Marshall College.
5. Courses taken at Franklin & Marshall for which a grade of "D+", "D", "D-", "F", or "NP" was received may not be repeated at another institution. Students may petition the Committee on Academic Status for exceptions to this policy.

Special policies and procedures apply for courses taken as part of a semester (or year-long) study abroad program or a domestic off-campus affiliated program. Interested students should consult the Office of International Programs for policies and procedures in this area.

ADVANCED PLACEMENT

Franklin & Marshall College participates in the Advanced Placement Program of the College Entrance Examination Board. A student who takes an Advanced Placement examination is given college credit if the subject matter of the Advanced Placement course and examination is comparable to that covered in an elementary course taught by a Franklin & Marshall department upon receipt of the student's official grade report sent from the College Board to Franklin & Marshall.

The following Franklin & Marshall course credits are currently awarded if a student achieves a test score of 4 or 5 on the Advanced Placement subjects listed:

AP Subject	**Franklin & Marshall Course**
Studio Art: 2D or 3D	ART Elective
Studio Art: Drawing	ART Elective
Art History	ART Elective
Biology	BIO 179 (fulfills Natural Science with Lab)
Capstone Research	General Elective
Capstone Seminar	General Elective
Chemistry	CHM 179*
Chinese Language/Culture	CHN 202
Computer Science A	CPS 111
Computer Sci. Principles	General Elective
Economics (Macro)	General Elective
Economics (Micro)	General Elective (for AP Economics exams taken prior to 2020, if credit is awarded for both Macro and Micro Economics, one credit is general elective and one credit is ECO 100)
English Literature/Comp.	General Elective
English Language/Comp.	General Elective
Environmental Science	General Elective
French Language/Culture	FRN 202 (for AP French exams taken in 2020, general elective credit is awarded.)
Human Geography	General Elective
German Language/Culture	GER 202 (for AP German exams taken in 2020, GER elective credit is awarded.)
Govt & Pol: U.S.	GOV 100
Govt & Pol: Comparative	GOV 120
U.S. History	HIS 138 (For AP U.S. History exams taken in 2020, general elective credit is awarded.)
European History	HIS 121
World History	HIS Elective
Italian Language/Culture	ITA 202
Japanese Language/Culture	JPN 301 for a score of 5; JPN 201 for a score of 4
Latin	LAT 179
Calculus AB	MAT 109
Calculus BC	MAT 109
Statistics	General Elective
Music Theory	MUS 224 for Aural subscore of 5; MUS 100 for Non-aural subscore of 4; MUS 278 for Non-aural subscore of 5; General Elective if overall score of 4 or 5 without qualifying subscores
Physics 1	PHY 101†
Physics 2	PHY 101†
Psychology	General Elective
Spanish Language/Culture	SPA 221 (For AP Spanish Language exams taken in 2020 or 2021, SPA 202 credit is awarded.)
Spanish Literature/Culture	SPA 222 (For AP Spanish Literature exams taken in 2020 or 2021, SPA 221 credit is awarded.)

*May not be used toward the Natural Science distribution requirement (Natural Science with lab or Natural Sciences in Perspective).

†Students may earn credit for either Physics 1 or Physics 2, but not both. The maximum amount of credit awarded for PHY 101 is 1 credit.

Advanced Placement examination subscores will be considered. Further details can be found at www.fandm.edu/registrar/managing-credits/advanced-placement.

When a student is awarded credit and advanced placement, the fact, but no grade, is entered on the student's permanent record, and the number of courses required for graduation is reduced by the number of courses for which credit is given. Such credit will satisfy a major or minor requirement if the course is listed in the Catalog as satisfying that requirement. Whether a student is awarded credit for more than one semester's work in a single subject is determined by the department concerned.

These procedures do not permit the granting of two college credits for the same work (e.g., introductory calculus taken in high school and repeated at Franklin & Marshall College). If a student is officially enrolled at the end of the second week of classes for a course at Franklin & Marshall College for which Advanced Placement credit has been awarded, the student forfeits the awarding of this credit.

There is no limit on the number of Advanced Placement course credits a student may receive, but these credits cannot count toward the 16 course credits that must be earned at Franklin & Marshall College nor toward the 21 course credits that must be earned with standard grades.

COLLEGE CREDITS TAKEN IN HIGH SCHOOL

Franklin & Marshall College will normally accept, in transfer, only those college credits taken while the student attended high school that are earned under all of the following conditions:

1. The course was taught on the campus of a college accredited by one of the regional accrediting associations;
2. The course was taught by a regular member of the college faculty;
3. The student was enrolled in a course with degree candidates of that college; and
4. The course was a regular part of the curriculum of the college.

Students wishing to appeal these policies may do so to the Associate Dean of the Faculty. All other policies listed under "Transfer Credit Prior to Matriculation" apply.

CREDIT BASED ON INTERNATIONAL ACADEMIC CREDENTIALS

International Baccalaureate (IB) diploma recipients with a total score of 30 or more are awarded eight course credits (one full year) toward the Franklin & Marshall degree. Subjects not eligible for transfer credit will be deducted from the total IB transfer award. IB Certificate recipients receive one or two course credits (depending on discipline) for each higher level examination in an eligible subject passed with a score of 5 or higher. IB credits may be counted toward major or minor requirements or electives contingent upon departmental approval.

French Baccalauréat and German Abitur recipients may be granted credit for up to one full year (eight course credits) toward a degree at Franklin & Marshall College.

The College generally awards credit to students who have passed British "A" Level examinations with a grade of "C" or higher in eligible subjects. See the Registrar for details.

Other course credits from countries outside of the United States are evaluated on an individual basis. If an accurate evaluation of these credentials is not possible, the student may be asked to secure, at his/her expense, a professional evaluation from an appropriate agency.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Franklin & Marshall College participates in the CLEP program of The College Board, accepting scores of 50 or higher in subject area tests as entrance credits. Matriculated students must receive the prior approval of the appropriate department chairperson.

WITHDRAWAL FROM THE COLLEGE

Students who withdraw voluntarily from the College (including those who transfer to another institution) must notify their College House Dean in writing. Students who withdraw from the College are expected to complete an Exit Survey.

The deadline for withdrawal from the College to exclude grades for the current semester is the last day of classes. All other withdrawals become effective with the beginning of the next semester.

WITHDRAWAL FEE SCHEDULE/ REFUND POLICY

The Higher Education Amendments of 1992 require that each institution participating in a Title IV program have a fair and equitable refund policy in effect.

When a student withdraws or takes a leave of absence, and officially notifies the Office of Student Affairs, the College will then process a refund to the student based on the following schedule:

WEEK	FALL 2022 DATES	REFUND
1	8/31-9/6	87.5%
2	9/7-9/13	75%
3	9/14-9/20	62.5%
4	9/21-9/27	50%
5	9/28-10/4	37.5%
6	10/5-10/11	25.0%
7	10/12-10-18	12.5%
8	10/19-10/25	12.5%
9	------	-----

WEEK	SPRING 2023 DATES	REFUND
1	1/17-1/23	87.5%
2	1/24-1/30	75%
3	1/31-2/6	62.5%
4	2/7-2/13	50%
5	2/14-2/20	37.5%
6	2/21-2/27	25.0%
7	2/28-3/6	12.5%
8	3/7-3/13	12.5%
9	------	-----

Policy:

The tuition refund/withdraw fee schedule is based on charges (fees) billed, not payments made. Charges that will be pro-rated based on the above schedule are: tuition, housing*, meal plans, the student activity fee & the health services fee. The orientation fee does not get pro-rated and is not refundable. The general deposit will be reversed in full.

For those students who are receiving institutional financial aid, institutional grants will be reduced according to the above schedule. Federal funds will be returned as prescribed by the Department of Education using Return to Title IV regulations.

*The only housing refunds included in this schedule are those where the housing charge was billed on the student's account.

LEAVE POLICY

There are five types of Leaves of Absence subject to the various conditions described in the following sections. See also International and Off-Campus Study, pages 4-6. The full details of this policy can be found at https://www.fandm.edu/dean/leave-of-absence.

LEAVES OF ABSENCE

The following conditions apply to all Leaves of Absence:

1. The College retains the Matriculation Deposit and the Advance Registration Deposit.
2. A student on Leave of Absence must meet the normal deadlines for applying for aid in order to be considered for funding for the semester in which he or she plans to return.
3. Commencing with the last day of enrollment before the leave takes effect, a student who has taken out an educational loan has a six-month grace period before repayment of the loan must begin.
4. A student on Leave of Absence may not be on campus without the permission of the Office of Student Affairs.
5. Students must complete their coursework within eight years of their initial matriculation. Should a student be on leave for a length of time that would prohibit completion within this time frame, the student may be withdrawn from the College.
6. The deadline for requesting a leave after a successful semester is June 1 for a Fall semester leave or January 1 for a Spring semester leave.
7. The deadline for submitting a request for reinstatement is May 1 for Fall reinstatement or December 1 for Spring reinstatement. (International students who require a visa may apply by November 1 for a provisional approval for Spring reinstatement pending any requirements set at the time of departure.)

Personal Leave of Absence

Students may, with the approval of their House Dean, and in consultation with their academic advisor, interrupt their Franklin & Marshall education and take a personal Leave of Absence to pursue other interests. Students desiring to take a personal leave from the College must communicate their intent to their House Dean in advance of the leave and complete a Leave of Absence Request Form.

The conditions governing a Personal Leave of Absence are as follows:

1. Students must be in good academic and disciplinary standing at the end of the semester immediately prior to the start of the leave.
2. Leaves should begin before the start of a regular semester and may not extend beyond two semesters. Exceptions may be granted by the Dean of Students.
3. Students on personal leave are not considered enrolled at Franklin & Marshall and are expected to leave the College community. Exceptions may be granted by the Dean of Students.
4. Students on leave are not permitted to take academic courses at another institution. In rare instances, students may be granted approval by the Dean of Students or designee to take courses while on leave. Such an exception also requires a petition to be submitted and approved by the Committee on Academic Status.The transfer of academic credit to Franklin & Marshall for course work taken while on leave is subject to the approval of the academic department and the College Registrar.
5. Students on personal leave must request a return to campus through the Reinstatement Committee.

Financial Leave of Absence

In cases where a student has not fully paid their tuition and/or fees to the College, the College may require the student to take a Leave of Absence. This leave is intended to provide the student an opportunity to assess their financial status so as to complete their financial obligation to the College.

The conditions governing a Financial Leave of Absence are as follows:

1. Students on a financial leave of absence are not considered enrolled at Franklin & Marshall and are expected to leave the College community. Exceptions may be granted by the Dean of Students.
2. Students on leave are not permitted to take academic courses at another institution. In rare instances, students may be granted approval by the Dean of Students or designee to take courses while on leave. The transfer of academic credit to Franklin & Marshall for course work taken while on leave is subject to the approval of the academic department and the College Registrar.
3. Students on a leave for financial reasons must request a return to campus through the Reinstatement Committee.

Additional information about financial aid can be found by contacting the Office of Financial Aid. https://www.fandm.edu/financial-aid.

Academic Suspension

In cases where a student has an academically unsuccessful semester, the student may be suspended and the College may require the student to take a Leave of Absence. This leave is not meant to be punitive; instead, it is intended to provide the student an opportunity to assess their academic progress to date and to allow the student to return to campus after showing appropriate readiness to return.

The conditions governing an academic suspension are as follows:

1. Students on a leave for an academic suspension are not considered enrolled at Franklin & Marshall and are expected to leave the College community. Exceptions may be granted by the Dean of Students.
2. Students on academic suspension are expected to enroll in at least one course at another institution during the period of suspension. Successful completion of at least one course to prove demonstrated readiness is required to return to F&M. Successful completion is achieved with a C or higher on the official transcript or certificate of completion from the course taken.The transfer of academic credit to Franklin & Marshall for course work taken while on leave is subject to the approval of the academic department and the College Registrar.
3. Students on a leave for an academic suspension must request a return to campus through the Reinstatement Committee.

Detailed information on Academic Suspension can be found under Academic Standards, pages 139-140.

Disciplinary Suspension

A student who is found responsible for academic misconduct or conduct in violation of the Student Code may be suspended from the College for a set period of time and required to take a Leave of Absence. Students are permitted to return to the College after meeting the conditions of their suspension and showing appropriate readiness to return.

The conditions governing a disciplinary suspension are as follows:

1. Students on a leave for a disciplinary suspension are not considered enrolled at Franklin & Marshall and are expected to leave the College community immediately. Exceptions for timing may be granted by the Dean of Students.
2. Students on leave are not permitted to take academic courses at another institution for transfer credit without approval by the Dean of Students or designee. The transfer of academic credit to Franklin & Marshall for course work taken while on leave is subject to the approval of the academic department and the College Registrar.
3. Students on a leave for a disciplinary suspension must request a return to campus through the Leave of Absence Reinstatement Committee.

Additional information may be found in the Student Code: https://www.fandm.edu/college-life-manual/student-rights-freedoms-and-responsibilities/the-student-code.

Health Leave of Absence

For a variety of reasons, students may find it beneficial to request a Leave of Absence to address a health condition. In limited circumstances, the College may deem it necessary to require a student to take a Health Leave of Absence. The Health Leave status will continue until the student is prepared to return to the College and is approved by the Reinstatement Committee.

A student is encouraged to request a voluntary Health Leave in the event that they believe that their physical and/or mental health concerns are significantly interfering with their ability to succeed at Franklin & Marshall and/or that the demands of college life are interfering with their recovery, treatment, or safety. A student who, in consultation with either the medical or counseling staff at the Student Wellness Center or their personal health care provider, determines that they need to request a voluntary Health Leave should contact their House Dean to discuss the terms of the leave as determined by the College. Whenever possible, students intending to go on a Health Leave from the College should complete a Leave of Absence Request Form.

The conditions governing a health leave are as follows:

1. Students on a health leave are not considered enrolled at Franklin & Marshall and are expected to leave the College community. Exceptions may be granted by the Dean of Students.
2. Students on leave are not permitted to take academic courses at another institution. In rare instances, students may be granted approval by the Dean of Students or designee to take courses while on leave. The transfer of academic credit to Franklin & Marshall for course work taken while on leave is subject to the approval of the academic department and the College Registrar.
3. When a student is granted a Leave of Absence during a semester, the grade of 'W' will normally be recorded for courses in which the student is enrolled.
4. Students on a health leave must request a return to campus through the Reinstatement Committee.

READMISSION TO THE COLLEGE

Any person who has resigned or withdrawn from Franklin & Marshall College and wishes to be readmitted should contact the Office of Admission in order to apply to return. Readmission is not guaranteed. Return from a Leave of Absence or Approved Off-Campus Study is not considered readmission. When a student is readmitted, the graduation requirements are those that were in place when the student originally matriculated.

ASSESSMENT OF INSTRUCTION BY STUDENTS

At the end of each semester, students have the opportunity to provide the College with their assessments of the effectiveness of teaching in courses they have taken. These assessments of courses and instructors are submitted anonymously on a questionnaire, which includes some standard questions and some specific to the course. The questionnaires are completed in class every semester in courses taught by untenured faculty members and in alternate calendar years in the courses taught by those with tenure. The responses to these questionnaires are tabulated and the results are distributed only to the Provost and Dean of the Faculty, the Professional Standards Committee,

the chairperson of each faculty member's department, and the faculty members themselves. This information is used, together with other evidence bearing on the quality of a faculty member's teaching, in making decisions on rehiring, promotion and tenure. Students are expected to take the responsibility of providing this information seriously by completing the questionnaires as thoughtfully and objectively as possible, and by following closely the details of the process by which they are administered.

INFORMATION TECHNOLOGY AT FRANKLIN & MARSHALL

Franklin & Marshall College recognizes that technology plays a critical role in teaching, learning and research. We also recognize how essential a role technology does and will play in the lives of our students both while at F&M and once they graduate. To this end, the College strives to provide the very best technology resources in support of the teaching and learning mission of the institution.

The campus is well equipped with technology. Nearly 100% of F&M's classrooms are technology-enabled teaching spaces. The campus is 100% wireless enabled, including outdoor areas where students often gather and study. While not a requirement, nearly 90% of current students have followed the College's recommendation to bring a personal computer to campus. As well, there are public access computing facilities on campus where all students have access to F&M provided computers, including both campus libraries and the Kreisel Innovation Zone on the lower level of the Patricia E. Harris Center for Business, Government & Public Policy. These public computing spaces make available specialized software that students may not have on their personal computers such as statistical, mathematical and analytical applications. In addition to the public access computers, many of the academic departments have special-purpose computing labs. Access to printing is available to students across campus for a small fee per page.

Franklin & Marshall has adopted Canvas, a course/instructional management system. Canvas is a web-based solution for online delivery of course-based instructional materials. Many F&M faculty elect to use Canvas to provide access to course materials. The College provides a web-based campus-wide information portal called Inside F&M. Through Inside F&M, students can register for classes, examine progress toward their degree, and check their grades and other personal information. Faculty can manage their class rosters, guide advisees and submit grades. Franklin & Marshall uses Google Apps for Education for email, calendaring, file storage and other services. Google Apps is the primary tool for student collaboration, file sharing and document management.

Providing general assistance in the use of all information technology resources is the responsibility of Information Technology Services (ITS). Students are encouraged to visit ITS at our service desk as well as our technology lending center (TLC) located in the Kreisel Innovation Zone on the lower level of the Harris Center for Business, Government and Public Policy. ITS can also be reached by phone at 717-358-6789.

The use of technology resources on campus is governed by a collection of documented policies, and most notably the College's Acceptable Use Policy. This policy defines the appropriate use of Franklin & Marshall (F&M) information assets. Those that violate this policy are subject to the full range of sanctions set forth in the Student Handbook, the Employee Policy Guide as well as local, state, and federal laws. At their discretion, the College Infrastructure Committee reserves the right to modify these policies at any point in time. You can find all technology-related policies, including the Acceptable Use Policy, on the College website:
www.fandm.edu/college-policies/technology/.

Admission to the College

Franklin & Marshall College welcomes applications from students who seek to participate in an engaging liberal arts community. Students most competitive for admission are those who, in the judgment of the Admission Committee, will benefit from and contribute to both the academic and co-curricular programs of the College.

SELECTION

Selection is based upon several criteria, with the quality of the student's secondary school record as the most important. The best preparation for study at Franklin & Marshall is a rigorous academic program that provides fundamental training in the arts, English language, foreign language, history, literature, mathematics and science. It is highly recommended that a student have some combination of four years of strong English language and literature courses, three to four years of a modern or classical foreign language, four years of mathematics resulting in a readiness for beginning college calculus, at least two years of historical study and three years of study in the natural sciences. The College also recommends students take at least five academic courses during their senior year.

Other factors considered in a student's evaluation are participation in co-curricular activities, standardized test scores, recommendations and information concerning the student's personality and character. Students who do not believe their standardized test scores reflect their academic ability are welcome to apply to Franklin & Marshall using our Standard Test Option.

In order to apply using the Standardized Test Option, students should indicate their testing preference on the Common Application or Coalition Application when applying. If scores have already been sent, applicants may send a written request to the Office of Admission via email to have the scores removed from their record.

International students who have not attended English-based instruction for at least three years must submit either a TOEFL, IELTS, or Duolingo English Test.

An admission application must be accompanied by a $60, non-refundable application fee or valid fee waiver. Admitted applicants that wish to enroll, must submit a $500 non-refundable enrollment fee by the appropriate enrollment deadline based on the type of application.

CAMPUS VISIT AND INTERVIEW

A campus visit and interview are welcomed and recommended. Interviews are offered virtually by appointment on weekdays. Campus tours depart from the Admission Office, Monday through Friday. For those who are unable to visit the campus on a weekday, information sessions and tours are offered on select Saturdays. Additionally, regional interviews are offered at various times throughout the year. Interested parties are advised to schedule appointments for interviews and campus visits at least two weeks in advance at https://www.fandm.edu/visit/admission-visit or by contacting the Office of Admission at (877)678-9111.

TYPES OF APPLICATION

EARLY DECISION

Candidates who identify Franklin & Marshall as their first choice college and desire early notification of an admission decision are invited to apply through the binding Early Decision agreement. Candidates who submit a completed application and an Early Decision Agreement by November 15 for Early Decision Round I, will receive notification by December 15; those who apply by January 15, for Early Decision Round II, will be notified by February 15.

An Early Decision candidate may initiate applications to other institutions. However, if offered admission to Franklin & Marshall, the candidate is obligated to withdraw the other applications and enroll at Franklin & Marshall. Admitted students must submit their non-refundable $500 enrollment fee within one month of admission.

REGULAR ADMISSION

The Regular Decision deadline for submitting applications and all required credentials is January 15. Applicants for first-year status are notified of the Admission Committee's decisions by April 1. Admitted students must submit their non-refundable $500 enrollment fee by May 1st in order to reserve their seat in the first-year cohort.

HOME SCHOOLED OR NON-TRADITIONALLY EDUCATED STUDENTS

Students who are home schooled or educated in a non-traditional setting are welcome to apply to Franklin & Marshall College. Candidates for admission who are educated in the home must submit all required application paperwork. Students should present a transcript from either a parent or outside evaluating agency. If a parent serves as the primary source of evaluation for the student, he or she may submit the School Report and the Counselor Recommendation. The Office of Admission recommends home schooled students have an interview. It is required that home schooled students submit standardized test scores.

TRANSFER STUDENTS

Transfer applicants are welcome for fall and spring semesters. Transfer applicants are expected to be in good academic and social standing at their present and any past colleges or universities.

The Office of Admission maintains an April 15 priority deadline for fall transfer applications and November 15 for spring transfer admission. Applications completed after the priority deadline are reviewed on a space-available basis. To apply, a transfer application form must be accompanied by a $60, non-refundable application fee and all required application materials. Fall transfer applications completed by the priority deadline will be notified no later than June 1. Completed spring applications will be notified by December 15.

Transfer candidates interested in Summer School study should communicate directly with the Registrar's Office by phone at (717) 358-4168.

Questions regarding the transfer process should be directed to the Office of Admission by calling (717) 358-3951 or (877) 678-9111.

FINANCIAL AID

Approximately 60% of the students at Franklin & Marshall receive some form of financial aid from a variety of institutional, public and private sources. The College's financial aid policy reflects a desire to attract and retain a diverse student body of the highest possible promise. For those students to whom need-based aid is offered, the College strives to meet the majority of demonstrated need with grant funding. In most cases, the College packages several forms of financial aid, usually combining a grant with a student employment opportunity and loan.

Franklin & Marshall is a member of the College Board and the College Scholarship Service (CSS) and subscribes to that organization's principles of financial aid. Need-based grants are provided to students who have demonstrated financial need as determined from information submitted on the CSS/PROFILE form, the Free Application for Federal Student Assistance (FAFSA), federal tax documents (return, schedules, W-2s) and if applicable, the Noncustodial CSS/Profile form.

As the student is the primary beneficiary of the education, Franklin & Marshall assumes that each family will first make a reasonable sacrifice in financing its child's education before applying to the College for assistance. Students receiving financial aid from the College are expected to work during the summer to earn funds for their education. In addition, all applicants must apply for any state, federal, or other awards for which they may be eligible. Expected federal and state grants usually replace institutional grants. Failure to complete all applications for federal and state grants or to submit all materials by the appropriate deadlines could result in the loss of institutional funding.

For the purposes of awarding federal, state and institutional financial aid at Franklin & Marshall College, the Academic Year is defined by the Academic Calendar and comprised of two 15-week semesters. In addition to standard term awarding, students may receive federal or state aid for the summer terms, provided they enroll in at least two courses at Franklin & Marshall College. They may also receive federal or state aid when attending other colleges in the summer, provided they enroll in the equivalent of six semester hours and complete a Consortium Agreement provided by the Office of Financial Aid.

Institutional financial aid may only be received for a maximum of eight semesters. Federal financial aid requires a student to meet the Federal Satisfactory Academic Progress standards that are listed on the Office of Financial Aid's website.

Domestic and international students, including transfers, are eligible for financial assistance. Financial aid applications and all supporting financial aid documentation must be submitted as soon as possible, but no later than April 15 for the fall semester and by November 15 for the spring semester.

JOHN MARSHALL FELLOWS

The John Marshall Fellow Program supports a limited number of students who, during their first year at Franklin & Marshall, have demonstrated unusual motivation, spirit of achievement and independence of thought. The program was created on the premise that bright, curious minds flourish best when challenged in an environment that gives highest priority to individual interests and abilities. The Marshall Fellow is eligible to apply for a $4000 research/travel grant to enhance the Fellow's ability to engage in unique and personal academic pursuits, for example, supporting an on-campus research project, doing research in another country, presenting research at a professional conference, or completing a public service project.

TUITION AND FEES

Each student is charged, on a semester by semester basis, fees that cover tuition, room, board and most College charges for activities, labs, and some special events. The cost to the College of educating the student, of course, is well in excess of these fees. The balance is provided principally by gifts from alumni and friends and by income from endowments.

The schedule shown below indicates actual charges for academic year 2021–2022 and is subject to change without notice:

Tuition, Services & Activities Fee	**$65,652 per year**
Health Services Fee	$116 per year
Student Activity Fee	$76 per year
General Deposit	$200 per year
New Student Orientation Fee	$200 (one-time fee)

This fee is charged in a student's first semester at F&M. This is a non-refundable fee.

Housing/Room Fee Options:

Standard Room Fee (Double/Triple)	$8,900 per year
Special Room Fee (Single)	$9,652 per year
Suite Room Fee	$10,004 per year
Roschel College House Apartment Fee	$10,448 per year

Meal Plan Options:

20 Meals Per Week/
$180 Flex Dollars* — $6,140 per year

Required of all First Year students. Available to upper classes.

14 Meals Per Week/
$250 Flex Dollars* — $6,018 per year

Minimum required for Sophomores, Juniors & Seniors living on campus in residential rooms and suites.

125 Block Meal Plan/
$220 Flex Dollars — $5,474 per year

Available only to Juniors & Seniors living off-campus. Sophomores who live off-campus in a theme house with a kitchen are required to purchase a 125 Block Meal Plan or higher.

70 Block Meal Plan/
$225 Flex Dollars — $3,840 per year

Available only to Juniors & Seniors living off-campus.

50 Block Meal Plan/
$340 Flex Dollars — $3,288 per year

Available only to Juniors & Seniors living off-campus.

Additional Meal Plan Notes:

1. A meal plan is required for students living on campus in residential rooms and suites.
2. Juniors and Seniors living in apartments in College Row, College Hill, a James Street Property, Roschel College House, or a theme house with a full kitchen have the option to select a meal plan, but it is not required. Sophomore students approved to live in these spaces are required to maintain a meal plan at the125 Block Meal Plan level or higher.
3. Students approved as Commuters are not required to have a meal plan. Please contact the Housing Office with questions about Commuter status.
4. Meal plans encompass only dates when classes are in session. During College breaks and closures, dining services may not be available or additional charges for dining may apply for students who elect to stay on campus.

Student Health Insurance Options:

Student Health
Insurance Plan (SHIP) $2,201 per year

Health insurance coverage is required for all full-time students to cover them for every day of their higher education career. This includes summers and breaks. The Student Health Insurance Plan (SHIP) is offered to Franklin & Marshall students through QM Services, our insurance administrator. The SHIP policy runs from August 1 through July 31.

The SHIP coverage can be waived if the student provides verifiable proof of comparable insurance coverage to QM Services. The waiver process must be completed by August 29, 2022. Students will be charged for the SHIP coverage on the first Fall eBill of the year. As waiver information is received by the College from QM Services, the charge will be reversed on the student's account.

International students are required to purchase the SHIP coverage. International students studying abroad are exempt from having to have coverage.

Domestic students not studying on campus may enroll if they need coverage.

Other Fees:

Part-time students $8,206 per course
Those taking fewer than three credits in a semester.

Application for Admission Fee $60
Must accompany each application for admission to the College. This is a non-refundable fee.

Enrollment Fee $500
Required of each incoming first-year student, transfer student or re-admitted student to reserve and maintain the student's position in the College. This is a non-refundable fee.

Proficiency Examination Fee $100 per course
Assessed for each proficiency exam taken by a student to earn credit for a course. This is a non-refundable fee.

Late Payment Fee $500 per semester
Assessed on accounts that are not paid by the specified due date.

Returned Check/Payment Fee $25
Assessed for each returned payment.

Any student whose College bill remains unpaid at the time of graduation is not eligible to receive a diploma. The College reserves the right to refuse to release official transcripts of a student's records if bills are unpaid.

TUITION REFUND INSURANCE

F&M has partnered with GradGuard to provide families with tuition insurance. This coverage expands the scope of the College's refund policy by ensuring reimbursement for tuition, room & board and other fees for covered withdrawals at any time during the semester. Please visit www.gradguard.com/tuition/fandm or call Customer Service at 1-877-794-6603 for more information. The deadline to sign up for this insurance is PRIOR to the first day of classes.

TUITION PAYMENT OPTIONS

All charges and fees for each semester are billed in advance and must be paid in full by the specified term due date. Franklin & Marshall accepts payment in the form of check, cash, money order, online via credit card (MasterCard, Discover, American Express, or Visa), online via debit of a checking/savings account or via wire transfer. Please note-a convenience fee of 2.75% will be charged on all domestic credit/debit card payments (4.25% for international cards). All online payments are made through the Transact Campus payment portal.

Franklin & Marshall recognizes that full payment due at the beginning of each semester may present a challenge, so the College has payment plan options available through the Transact Campus payment portal. These plans provide a convenient alternative to lump sum semester payments. Payment plans are now available by semester (not full-year).

Student accounts that remain unsettled at the end of a semester will be reviewed by the Committee on Student Financial Status. In the event that an account remains unpaid, the student may be placed on a Leave of Absence for Financial Reasons. If this occurs, payment in full is required in order for the student to enroll in a subsequent semester, the student may not be on campus during the leave period and the student is not eligible to take courses at another institution for transfer credit. Delinquent accounts may be referred to a collection agency for further collection action.

INSTITUTIONAL PROCEDURES RELATING TO TITLE IX OF THE EDUCATION AMENDMENTS OF 1972

In accordance with Title IX of the Education Amendments of 1972, which prohibits a college from discrimination based on sex, Franklin & Marshall College does not discriminate on the basis of sex or gender in its education programs and activities.

Inquiries concerning the application of Title IX may be referred to the Title IX Coordinator:

Dr. Kate Buchkoski
Franklin & Marshall College
Lancaster, PA 17604
telephone number: 717-358-7178
email address: kate.buchkoski@fandm.edu

Inquiries or complaints may also be directed to:

Assistant Secretary for Civil Rights
U.S. Department of Education
Office for Civil Rights
400 Maryland Avenue, SW
Washington, D.C. 20202-1100
Telephone: 800-421-3481
Email: OCR@ed.gov

INSTITUTIONAL PROCEDURES RELATING TO THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 (FERPA)

A. The Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974 ("FERPA" or "the Act") codified previously adopted policies of Franklin & Marshall College concerning the rights of students to the confidentiality of their education records and to the rights of students to have access to such records. However, the Act makes certain rights and procedures explicit and requires that the College establish certain procedures to ensure that the purpose of the Act is achieved. The full Act and the regulations thereunder are available at http://www2.ed.gov/policy/gen/reg/ferpa/index.html.

The major features of the Act are the identification of education records of students, the right of student access to such records, the opportunity of students to correct or amend these records when warranted and the privacy of the records. The following paragraphs summarize the Act and the procedures used at Franklin & Marshall College for the implementation of the Act.

1. **Definition of Education Records**
   Education records are defined by the Act as those records, files, documents, and other materials that contain information directly related to a student and are maintained by the College or an agent of the College. Students will be notified of their FERPA rights annually by publication in the Catalog. These records include:
   a. Admission folders and materials held in the Office of Admission until transferred to the Registrar's Office.
   b. Academic records, grade reports, transcripts of grades, major and minor declaration forms, and such other information as may appear on the College transcript held in the Registrar's Office.
   c. Records and documents related to the decisions of the Committee on Academic Status and the Student Conduct Committee and general information regarding the student's curricular and extracurricular performance and activities, held in the office of the Office of Student Affairs.
   d. Records held by those advising and evaluating students, such as academic advisers, the Health Professions Advisory Committee, the Office of Student and Post-Graduate Development, Faculty Dons, and House Deans.
   e. Records and documents held in the Office of Financial Aid.

Further information about files, their location and their custodian is in the Office of the Provost and Dean of the Faculty.

2. **Privacy of Student Education Records**
   a. *Release of Student Education Records:* No education record shall be released by the College or its agents, nor shall access be granted thereto without the consent of the student except as hereinafter provided in paragraph 2.b. below, or as otherwise provided by law. Student requests for the release of information may be made by completing the forms provided for the purpose with the officer of the College holding such education record(s).
   b. *Release of Records Without Student Consent:* The Act provides for exceptions to the necessity of the College obtaining a student's consent before releasing or permitting access to that student's records. General exceptions include the following:
      1) School officials who have a legitimate educational interest in the records. School officials include: l) any persons employed by the College in an administrative, supervisory, academic, research, or support staff position; 2) a person elected to the Board of Trustees; 3) a person employed by or under contract to the College to perform a special task; or 4) a student serving on an official committee or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official is l) performing a task that is specified in his or her job description or by a contract agreement; 2) performing a task related to a student's education; 3) performing a task related to the discipline of a student; or 4) providing a service or benefit relating to the student or student's counseling, job placement, or financial aid.
      2) Authorized representatives of government who need the information to audit, to oversee, or to administer the Act, federally supported education programs, or financial obligations of the College or the student.
      3) Organizations conducting studies concerning the validity of predictive tests, administering student aid programs, or improving instruction, if such studies are conducted in such a manner that specific students cannot be identified in the publication of the results and provided such information will be destroyed when it is no longer needed for the purpose for which the study was made.
      4) Accrediting organizations for the performance of their accrediting function.
      5) Parents or guardians of a student who have established with the Office of Student Affairs or the Registrar (depending on the record sought) that student's status as dependent according to the Internal Revenue Code of 1954, Section

152.

6) Information required by judicial order, or any lawfully issued subpoena, to be released on condition that in most cases the student will be notified in advance of compliance so that the student may seek protective action.
7) In the event of a health or safety emergency, information may be released to appropriate persons without the consent of the student if such information is necessary to protect the health or safety of the student or of other persons.
8) Officials of another school, upon request, at which a student seeks or intends to enroll.
9) In connection with a student's request for, or receipt of, financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
10) If required by a state law requiring disclosure that was adopted before November 19, 1974.

Complaints regarding alleged failures by Franklin & Marshall College to comply with the requirements of FERPA should be forwarded to:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

c. *Directory Information:* Neither the Act nor these procedures preclude the publication by the College of directory information providing that the student has not withdrawn consent for the publication of or electronic access to such information. This directory information includes and is limited to the following:
   1) Name, home address, home phone number, local address, local phone number, e-mail address, photograph, and names and addresses of parents or guardians.
   2) Name and address of secondary school attended, periods of enrollment and degrees awarded, academic major(s) and minor (when applicable), date of graduation, confirmation of signature, and membership in College organizations.
   3) Such information as is normally included on rosters and programs prepared for athletic contests.
   4) Announcement of the granting of honors, awards and other accomplishments.

   Students may withhold directory information in any or all of the above categories by indicating their wishes on the appropriate screen on Inside F&M or by contacting the Office of the Registrar. Students are responsible for any impact that such an action may have and should carefully consider the consequences. Questions should be directed to the Office of the Registrar.

3. Access to Education Records

Subject to the procedures and the exceptions contained below, students have a right of access to the records described in Section A1., above, a right to challenge the accuracy of these records, and a right to have explanations or comments on these records placed in their file. They also have a right to have copies of their records with a payment to cover the costs of duplication.

a. The Act contains exceptions to the general right of students to access to files and documents. These exceptions are:
   1) Confidential statements and letters placed in the files prior to January 1, 1975, and confined in their use to the purposes for which they were intended.
   2) Confidential letters and statements to which students have waived a right of access.
   3) Notes, statements, records, documents or other papers that are kept in the sole possession of the maker thereof and are not accessible to others (such as private notes made by professors, academic advisers, or administrators that are purely personal reminders of an event or fact that they may or may not use in a subsequent decision such as determining a grade in a course, advising as to courses, etc.).
   4) Records and documents of the Department of Public Safety.
   5) Records used in connection with the medical, psychological, or psychiatric treatment of the student.
   6) Confidential financial records of students' parents or guardians.

b. *Waiver of Access*. A student may waive a right of access to confidential statements and letters submitted as part of his or her admissions dossier, but this waiver does not apply if the letters or statements are used for purposes other than to make a judgment about the admission of the student to Franklin & Marshall College. Students may also waive a right of access to confidential recommendations respecting admission to another college or university, a graduate or professional school, or for other opportunities such as internships. Authors of such letters will give the student an opportunity to waive a right of access to such letters of recommendation as they may write. Students may also waive a right of access to confidential recommendations concerning application for employment or receipt of an honor or honorary recognition.

c. *Access Procedure*. Students who wish to review their records may do so by submitting an application to the appropriate officer of the College on a form provided for the purpose that shall identify what part of the education records the student wishes to review. Within 45 days of the submission of the application, a representative of the College office responsible for maintaining those records will provide the student with the records and documents to which the student is entitled and will provide such explanations or comments as the student may require for clarification. Should the student

challenge any part of the folder, file, document, or record, the Provost (or designee) shall try to resolve the matter by such informal means as discussion and/or deletion of erroneous material, addition to the record of an explanatory statement, or such other remedy as is deemed appropriate in the judgment of the Provost (or designee) and the student.

If the challenge to the content of the record cannot be resolved by such informal means, a hearing shall be held within a reasonable time to resolve the matter, and the decision of the hearing panel will be final. The hearing panel (all three members of which are to be drawn from the College community) will be made up of a member chosen by the student, a member chosen by the Provost, and a member chosen by the Provost's representative and the student's representative.

The decision of the hearing panel will be rendered within ten days of the hearing, will be in writing, and will be delivered to the student and the Provost.

d. *Record of Access*. Those officers under whose care the records are kept shall maintain a log of the names of those who have requested or been granted access to a student's record, the dates of all such transactions, and the legitimate interest of each person in obtaining this information.
e. *Limited Scope and Purpose of Student Review of Records*. It is not the intention of the Act or these procedures to provide a forum for challenging course grades, the decisions of the Committee on Academic Status, the Student Conduct Committee, or any other committee or office of the College assigned the responsibility to make judgments. Rather, it is the intention of the Act and these procedures to make known to students the informational base upon which decisions included in the education records are made and to allow corrections of that information or inclusion of explanatory statements.

4. Administration of Policy and Procedures

The Provost shall have general oversight of the administration of the Act and the above procedures. Questions concerning the matters covered by these procedures and the Act should be directed to the Provost.

Recommendations for changes and amendments to these regulations will be welcomed by the Provost, and such changes as experience demonstrates should be made in a manner and at such times as conform to Franklin & Marshall procedures.

5. FERPA for Families

Franklin & Marshall College recognizes the critical role that parents and families play in supporting their student's growth and development through college. With that in mind, the College has established the following policy with regard to the release of information from students' education records; the policy is intended to balance the autonomy conveyed by the Federal regulations to the student with the vital support system provided by parents and guardians.

As noted within the FERPA regulations above, the right to release information from their records transfers from parents to students upon their enrollment in a post-secondary institution, even when the student is under age 18. This means that, with a few exceptions, disclosures from the education records are to be made only upon the student's written consent.

One of the exceptions within the regulations is that the College may release information to the student's parents or guardians without the student's written permission when the student is determine*d* to be a dependent according to the Internal Revenue Code of 1854, Section 154.

Though disclosure is permitted, in most cases Franklin & Marshall does not release student records under this provision. The core of this policy surrounds our particular circumstances as a residential institution. It has been the College's belief in the importance of building a relationship of trust between the student and the institution, which becomes especially critical with the health and safety considerations that come into play in a residential environment.

Instances in which Franklin & Marshall will release information to parents of dependent students:

a. Change in a Student's Standing:
    1) Franklin & Marshall believes students are ultimately responsible for their academic performance. However, when a student is placed on advisory status at the end of a semester as a result of low semester and/or cumulative GPA, parents of dependent students will receive notification, so that they may provide support as the student develops a plan to improve for the subsequent semester.
    2) Additionally, when a student is placed on academic suspension as a result of either failing all courses in a semester or failing to meet the appropriate cumulative GPA threshold, parents of dependent students will be notified, so that they may provide support as the student makes plans for their time away from F&M.
    3) Finally, parents will be notified when a student's change in status occurs as a result of disciplinary action.

ACCOMMODATION FOR DISABILITIES: REHABILITATION ACT OF 1973, SECTION 504

In accordance with equal education opportunity laws, Franklin & Marshall College arranges to provide reasonable academic accommodations for students whose disabilities limit their participation in academic programs for which they are qualified. Students are required to notify the Office of Student Accessibility Services if they will need special services or accommodations in the classroom or if they want faculty, academic advisers, or administrative offices notified of a disability. Reasonable academic accommodations for students with disabilities are determined on an individual basis utilizing the required documentation of the disability.

The College does not have a special program for students with disabilities. For example, there are no special classes or tutors for students with learning disabilities or attention deficit

hyperactivity disorder. The academic support system for a student with a disability is the same as the academic support system for all students.

The College has designated Alison Hobbs, Psy.D. as the Director of Student Accessibility Services. In this role, Dr. Hobbs coordinates services and accommodations to meet the needs of students with disabilities that limit their participation in the programs and activities of the College. Dr. Hobbs reviews all required documentation of disability and determines the reasonable academic accommodations for each individual student. Every student at the College has the opportunity to complete an Intake Form available throughout the year at the Office of Student Accessibility Services and on its web site, www.fandm.edu/office-of-student-accessibility-services. The College considers information provided on this form as confidential and only uses it to provide reasonable accommodations for qualifying students.

Students who wish to appeal an accommodation or file a complaint arising under Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act should use the following procedures:

PROCEDURE FOR APPEAL OF ACCOMMODATIONS OR FILING OF COMPLAINT UNDER THE REHABILITATION ACT OR AMERICANS WITH DISABILITIES ACT

I. Jurisdiction

This procedure may be used by students to report discrimination based on disability in any College program or activity. Employees who wish to report disability discrimination should contact Human Resources.

II. Covered Conduct

1. Discrimination (including harassment): Individuals who experience negative or adverse treatment based on disability that is sufficiently serious to deny or limit their ability to participate in a College program or activity may file a complaint under this procedure. Examples of disability discrimination include verbal or physical harassment based on disability and disparate treatment based on disability.
2. Disagreements regarding accommodations: In some instances, concerns related to the provision of academic adjustments and auxiliary aids and services (commonly called accommodations or modifications) may constitute disability discrimination. Disagreements regarding the denial of requested accommodations and the sufficiency of approved accommodations, for example, may be raised under this procedure.
3. Retaliation: The College does not tolerate retaliation against individuals who complain about disability discrimination or otherwise assert their rights under Section 504 or the Americans with Disabilities Act. Individuals who experience retaliation, intimidation, or retaliatory harassment may file a complaint using the process outlined below.

III. Time Frame for Filing

Complaints of disability discrimination should be made promptly. The passage of time between the date of the alleged discrimination and the filing of a complaint may impair the College's ability to look into the complaint and provide appropriate relief, as key witnesses and evidence may no longer be available. A student who wishes to appeal an accommodation because the accommodation is felt to be inadequate or inappropriate is encouraged to contact Student Accessibility Services within 90 days of receiving the accommodation to discuss their concerns.

IV. Informal Resolution

Individuals who experience disability discrimination, who disagree with an approved accommodation, or who have difficulty obtaining approved accommodations are encouraged to contact Dr. Alison Hobbs to discuss their concerns. If the actions of Dr. Alison Hobbs are at issue, individuals may choose to contact the Dean of Students. The informal process is voluntary. A complainant may conclude the informal process at any time and file a formal complaint.

V. Formal Resolution

Complaints must be made in writing to the Office of Student Affairs within 90 days and should include a description of the nature of the alleged discrimination and the parties. If the participation of the Dean of Students in the process would create a conflict of interest, written complaints may be made to the Vice President and Dean of Student Affairs.

Within 30 business days of receipt of the complaint, the Dean of Students or designee will look into the complaint and may conduct a formal investigation, as appropriate. This process provides for the prompt, reliable, and impartial investigation of complaints, including an equal opportunity for the parties to present witnesses and evidence. Investigations generally will be completed within the aforementioned time frame.

Within 5 working days of the conclusion of the inquiry or investigation, the Dean of Students will provide written notice of the outcome to the parties.

VI. Appeal

Either party may appeal the outcome of the formal process by filing a written appeal within 15 days of the date that written notice of the outcome is sent to the parties. Appeals should be made to Margaret Hazlett, Vice President and Dean of Student Affairs. In the event that the participation of Dean Hazlett would present a conflict of interest, appeals may be filed with the Vice President for Finance and Administration, Michael Todd.

Appeals will be decided within 30 days of the date they are filed. The appeal of an accommodation that involves the waiver of an academic requirement must be presented to the Committee on Academic Status in consultation with Student Accessibility Services. The parties will receive written notice of the outcome of the appeal process within 5 working days of the conclusion of the process.

VII. Role of the Section 504/ADA Coordinator

The Section 504 Coordinator will receive notice of any complaints that are filed under this procedure and will receive updates regarding the status of complaints. The Section 504

Coordinator will maintain documentation related to complaints, reports, and investigations of disability discrimination.

VIII. Anti-harassment Statement
In cases of disability harassment, the College will take prompt and appropriate steps to end a hostile environment if one has been created, prevent the recurrence of any harassment, and correct discriminatory effects on the complainant and others, if appropriate. Individuals who experience disability harassment may receive interim remedies, as appropriate, such as academic assistance and other appropriate relief. The College takes seriously complaints of disability harassment and will take prompt disciplinary action against individuals who engage in disability harassment.

IX. Confidentiality
The College will maintain the confidentiality of the parties to disability discrimination cases and related records, consistent with applicable federal and state laws.

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